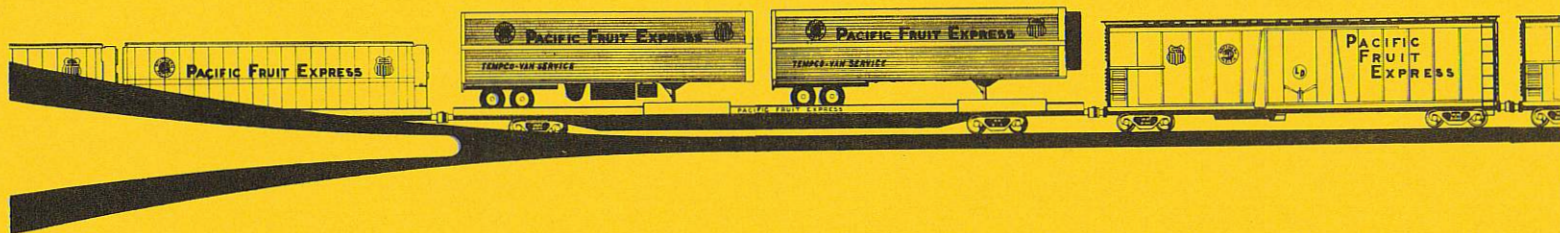
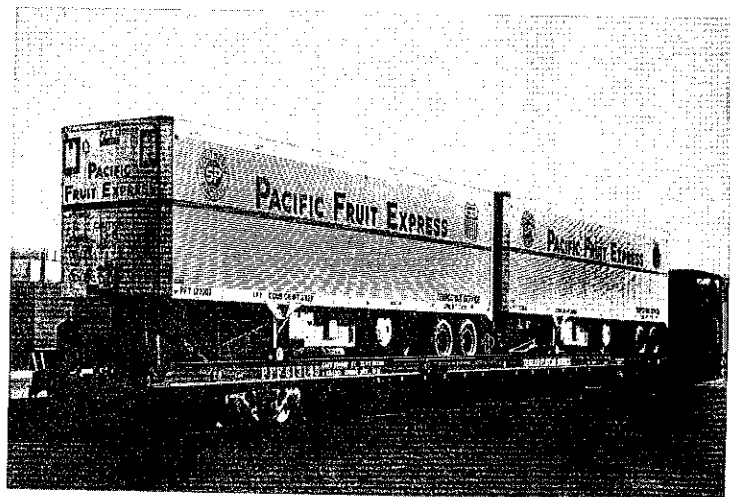
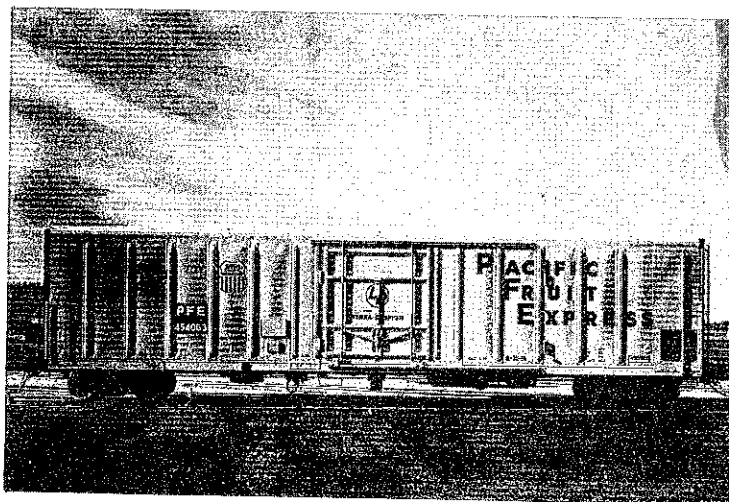


REFRIGERATED CONTAINER TRAILER AND RAIL CAR SERVICE



HISTORY AND FUNCTIONS OF PACIFIC FRUIT EXPRESS COMPANY

OFFICE OF -
VICE PRESIDENT & GENERAL MANAGER
SAN FRANCISCO, CALIFORNIA

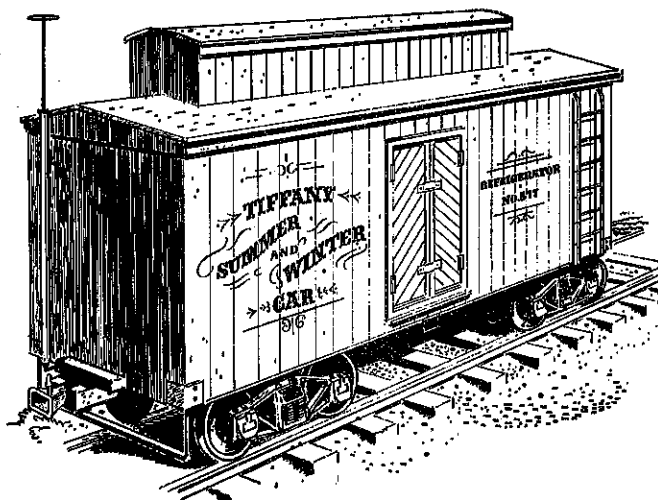


In the early years after the birth of our Country when the population was predominantly agrarian and all foodstuffs were grown near the point of consumption, there was little transportation involved in moving them to consumers. As the impetus of industry became more prominent, there was a gradual shift of population to larger communities, but fresh fruits and vegetables were still grown primarily near the fringes of the larger metropolitan areas then existent, and the mode of transport for them was the farmer's horse and wagon.

Late in the 19th Century as the rapid growth of industrialization became more evident, it also became apparent the business of growing perishable foodstuffs and moving them to the consuming public, largely centered in the ever-growing cities, would have to undergo a considerable change. It was becoming quite plain that a more efficient manner of farming was necessary to keep pace with the population increase, with longer growing seasons in different sections of the country. Along with this, pooling of shipments to the metropolitan centers became necessary to obtain fast and efficient transportation service.

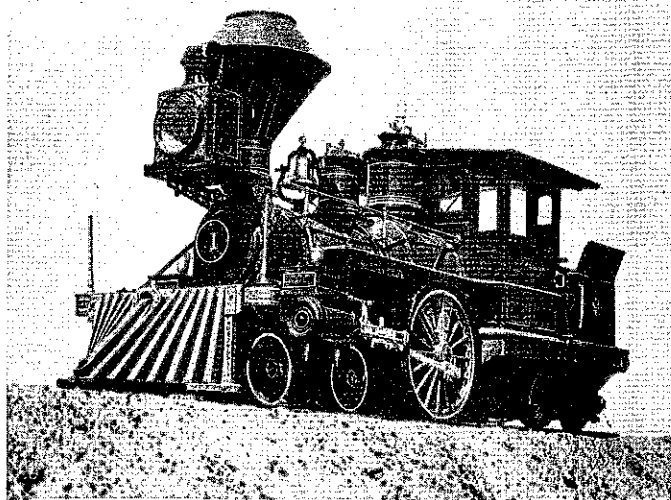
It was at this time the railroads of the country sought a means of carrying these highly perishable commodities to protect them from extremes of ambient temperatures by furnishing a vehicle or car equipped with some form of insulation and refrigeration to retard undue ripening and prevent spoilage, or furnishing heat to prevent freezing.

There were a number of attempts to design a railroad car for this purpose and, finally, in 1872 Parker Earle, a strawberry grower of Cobden, Illinois, built the first successful refrigerator car under a Tiffany patent. This car had a 'V' shaped ice bunker suspended from the roof with a capacity of 3,000 lbs. of ice, a substantial increase in the amount of ice over the experiments in earlier cars. The car was probably insulated with sawdust.

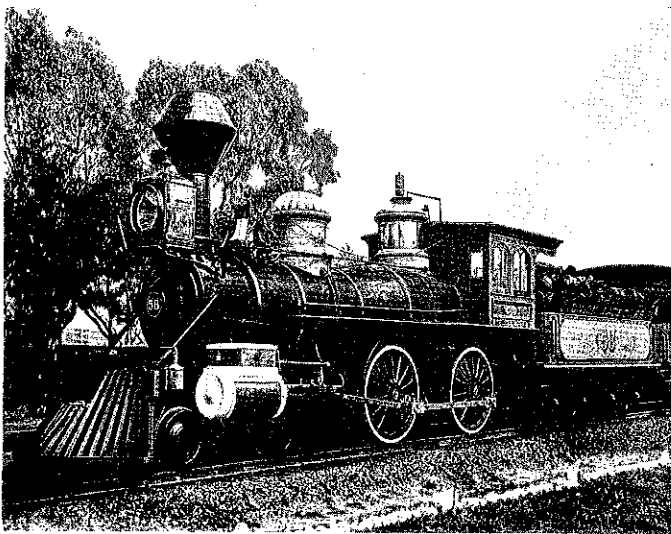


THE EARLIEST REEFER

The earlier shipments of perishables in rail cars involved movements over comparatively short distances. Mr. Earle, for example, shipped strawberries from Central Illinois to Chicago and there were some shipments of meat from Chicago to Boston, with limited success. Also, there was a shipment of butter which moved from Upper New York State to Boston. However, it was not until quite late in the 19th Century that really successful shipments were achieved with any regularity.



THE C. P. HUNTINGTON - FIRST S.P. LOCOMOTIVE



NO. 58 - AN EARLY U.P. LOCOMOTIVE

Around the beginning of the 20th Century, Southern Pacific Company and Union Pacific Railroad Company, both being located in Western producing areas, foresaw that shipments of perishable foodstuffs to the Midwest and East would become an important element of their business in the future. They also quickly realized the handling of perishable foodstuffs would have to be markedly different than handling general freight cargoes. Therefore, in 1906, their Managements decided it would be more efficient and desirable for them to es-

establish a subsidiary company to conduct and manage this phase of their operations, owned fifty-fifty by each company.



C. M. SECRÍST, the first Vice President & General Manager of PFE, helped organize the new company and headed up its operations from February 1907 to December 1923.

It was on December 7, 1906, that the necessary formalities were observed for the incorporation of Pacific Fruit Express Company in the State of Utah and the operations of this fledgling commenced in October 1907. The Articles of Incorporation provided:

"The business of this corporation shall be as follows:

(a) To manufacture, purchase, rent and otherwise acquire, and to hold, own, equip, repair, maintain, operate and otherwise utilize, refrigerator cars, ventilator cars, fruit cars, freight cars and other cars, rolling stock and vehicles, and all other means and instrumentalities of transportation or conveyance by land or water; also ice-houses, ice-factories, refrigerator plants, cold-storage plants and other machinery, apparatus and appliances, necessary, useful or desirable to facilitate or in connection with the shipment, transportation and storage of fruits, vegetables and other freight; also repair shops, storage yards, warehouses, stockyards, scales, wharves, platforms, and other structures, appliances, and property, and to sell, mortgage, lease, and otherwise dispose of any of the aforesaid properties and appliances, and the use, products or contents thereof including the sale of refrigeration.

(b) To apply for, register, purchase or otherwise acquire and to hold, own, use and operate, and to sell, assign, grant licenses in respect of, or otherwise dispose of and deal with and turn to

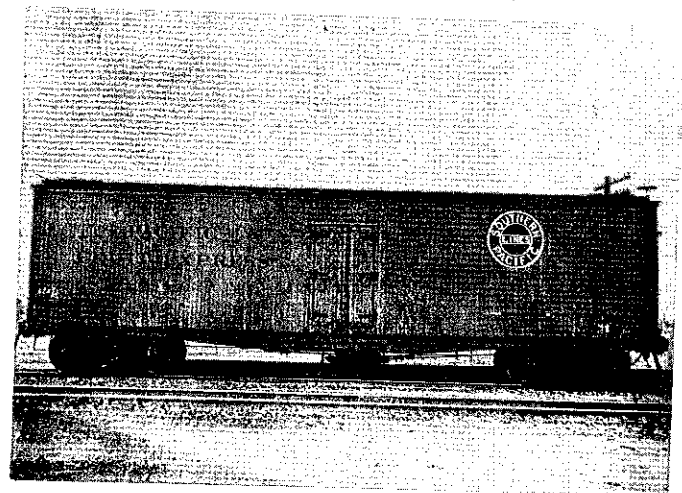
account, any and all inventions, improvements, trade-names and trade-marks, copyrights, letters patent of the United States, and of any and all foreign countries, and patent rights of all kinds.

(c) To protect, preserve and care for fruits, vegetables, meats and other perishable commodities either while in transit or while in storage, including the icing, refrigeration, ventilation, loading, unloading and storing of such commodities.

(d) In general to carry on any other lawful business in connection with the foregoing which is incidental thereto, and to possess all the powers and enjoy all the privileges which have been or which shall hereafter be conferred by the laws of the State of Utah upon any corporation organized or that may be organized under the laws of said State for any of the purposes for which this corporation is formed, it being hereby expressly provided that the foregoing enumeration of specific powers shall not be held to limit or restrict in any manner the powers of the corporation."

It is well Southern Pacific and Union Pacific granted such latitude at the beginning as in the over half-century of PFE's history, there has been much change in the methods of handling perishables.

In 1906, when plans for the new PFE company were laid, an initial fleet of 6,600 refrigerator cars was ordered and when operations began later in 1907 this constituted the first PFE fleet of cars. The first PFE car placed in service is pictured below.



FIRST PFE CAR

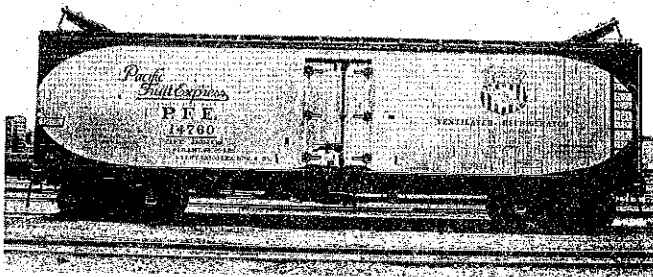
These first cars were 40 ft. in length, had a lading compartment capacity of 1,780 cu. ft., and were capable of carrying 30,000 lbs. of fresh fruits or vegetables. Refrigeration was provided by means of ice bunkers placed in each end of the car which were simply partitions in the interior of the car providing a chamber for ice and the circulation of air from the lading compartment. The capacity of these earlier ice bunkers was 10,000 lbs. of ice. Later cars provided for as much as 13,300 lbs. of ice but 11,500 lbs. became the general standard. The falling temperatures of the air and natural convection were relied upon

for circulation of air throughout the car. During cold weather months, heat was provided as necessary by charcoal heaters placed in the ice bunkers.

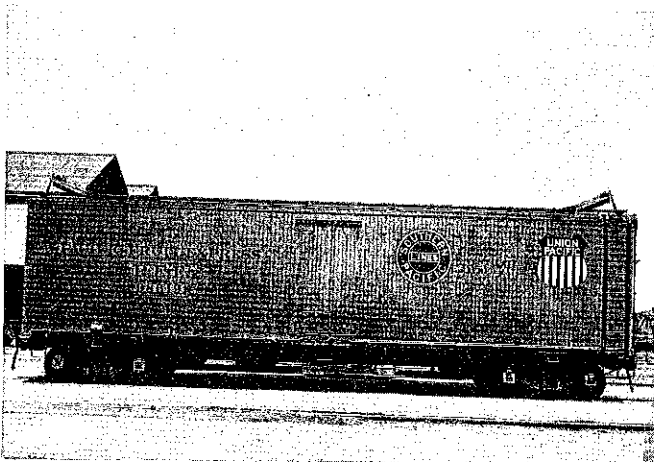
The cars were insulated in the walls, ceiling and floor by 2½ inches of processed panels made from flax, which was the most efficient material then available.

At first, PFE handled almost entirely fresh 'green' fruits from California in blocks of refrigerator cars and this phrase has stuck over the years as perishable trains are still called 'fruit blocks' even though all types of fresh fruits, vegetables, frozen foods and other perishable commodities are now handled in the same trains.

During subsequent years many improvements were made in the rolling stock PFE used to satisfy the needs of perishable shippers and its Parent and contract railroads. Following pictures are later cars, PFE 14760, built in 1918, and PFE 98619, built in July 1926:



1918 REEFER



1926 REEFER

The 1926 car was 40 ft. in length, had a capacity of 1,988 cu. ft., and could carry 70,000 lbs. of perishables. It will be noted the exterior of the car, as was true with its predecessors, was ver-

tically planked with tongue-and-groove siding. The major part of the construction of the superstructure of these cars was of wood, but steel was used entirely for the underframes. Four to six inches of hair-felt insulation were used.

There are two 'trap doors' on each end of the roofs of the cars. These are the hatches that, when open, permit the insertion of ice or heaters into the bunkers. It may also be noted the cars indicate 'ventilated refrigerator.' Some commodities at certain times of the year do not require refrigeration but do require a continuing movement of air, at the ambient temperature, through the food-stuff. To accomplish this, the hatches are raised and locked in position as shown in the photographs and as the car moves along the tracks air is forced in the forward hatches or 'ventilators' by the movement of the train, is circulated through the car and exited via rear hatches.



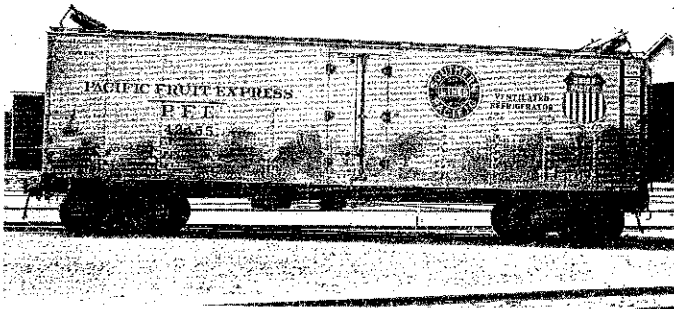
H. GIDDINGS, Vice President & General Manager from January 1924 to September 1942, guided the affairs of PFE during a period of great expansion. Under his administration, the fleet of refrigerator cars grew to nearly 41,000 and ice manufacturing and servicing facilities were substantially increased.

In 1936 the first 'steel sheathed' cars were acquired.

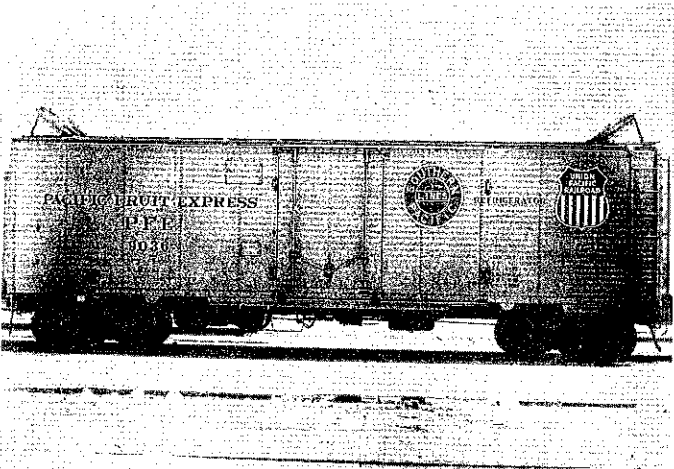
Although some wood was used in framing the superstructure of these cars, the exterior was all steel and provided a very strong and durable car. These cars were 40 ft. in length, still provided 1,988 cu. ft. of lading space, but could carry 80,000 lbs. Three inches of Kapok were used in walls, ceiling and floor for insulation.

PFE 9036 built in 1952 was the so-called R-40-26 class of car. It was still a 40-ft. car, with a loading capacity of 80,000 lbs. and accommodated a little over 2,000 cu. ft. of cargo. Four inches

of fibreglas or rockwool insulation were provided and it will be noted it was equipped with a 6-ft. sliding door as opposed to the 4-ft. hinged door previously used.



FIRST STEEL-SHEATHED CAR



1952 ICE BUNKER CAR - 6 FT. SLIDING DOOR

In this car, as well as many of its predecessors, fans are included for the mechanical movement of air through the car, not only while in ventilation service but also while under refrigeration or heater service. It had been determined that some assistance to natural air movement from convection was desirable to produce more equable top and bottom car air temperatures and thereby avoid shipments arriving destination with maturity of top layers more advanced than bottom layers. Accordingly, in 1941 mechanical floor fans were installed in the cars. These fans were operated by means of a rubber driver-wheel placed against the steel wheel of the car to provide power. They operated, of course, only when the car was in motion.

In 1951 electric fans were developed which operate from electricity provided by an alternator or generator which is also driven by the car wheels when the car is in motion.

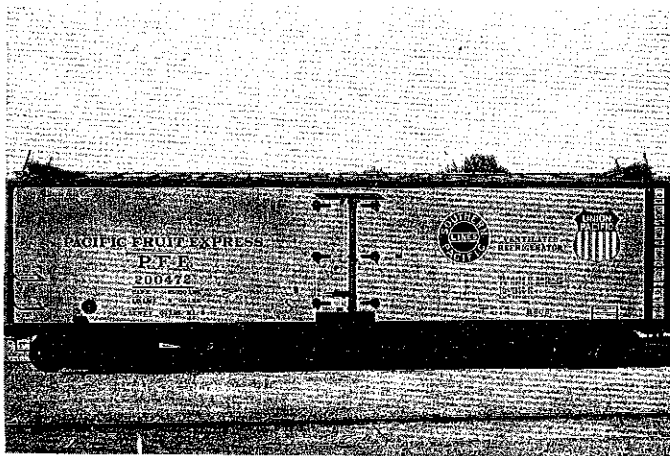
As has been noted, water ice is used in these cars in order to furnish refrigeration. Water ice melts at 32° and use of ice alone is not wholly effective in reducing or holding the load of perishables as low as 32°. By the addition of salt, however, mixed in with the ice which promotes meltage and thereby accelerates absorption of heat, car temperatures of 10-12° above zero can be obtained. Varying proportions of salt are used to achieve commodity temperature rates according to the desires of the shippers and the particular commodity being carried.

During the 1930's, with the advent of frozen food processing in commercial volume, there developed a demand for even lower temperatures. PFE experimented along with frozen food processors and finally determined the best means then available for protecting this commodity. After properly freezing to a sufficiently low temperature (zero or below) and using heavily insulated cars, usually 6 ins. or more, it was found frozen foods could be transported with reasonable protection with water ice refrigeration provided salt was added to a proportion of approximately 30% of the ice supply. These experiments with this percentage of salt achieved the fastest melting rate feasible with



K. V. PLUMMER was Vice President & General Manager of PFE from October 1942 to February 1958 and was responsible for operations during the very difficult World War II years and the period of expansion and change immediately following. Under his administration, in 1952, a momentous step was taken in building the first mechanically refrigerated cars, thus foreshadowing a radical change in the Company's equipment and operations. Retiring at end of February 1958, he continued to take an active interest in PFE and general railroad affairs until his death in November 1966.

water ice and provided a temperature a few degrees above zero. Subsequently, it was determined by food experts that even lower temperatures were necessary for best protection, which could not be achieved by ice and salt. This led to the develop-



"GIANT" ICE BUNKER REEFER USED FOR FROZEN FOOD SHIPMENTS. CAR HAD 7 INCHES OF HAIR-FELT INSULATION, 4 FOOT DOORS, AND CARRIED 95,000 LBS. OF FROZEN FOODS

ment of the mechanical refrigeration system, explained later.

The use of ice for refrigeration required large amounts of ice and some efficient means of furnishing this ice to the bunkers of the cars at various points along the railroads. At strategic points on lines of SP and UP, ice plants were built by PFE and icing platforms installed. At one time, PFE had 7 natural ice plants and 18 artificial ice manufacturing plants in operation at various points on lines of its Parent Companies.

In the early days, PFE operated natural ice harvesting and storage facilities at such places as Donner Lake, Calif., North Powder, Ore., Laramie, Wyo., Carlin, Nev., Montpelier and Payette, Ida., and North Platte, Nebr., the largest in the world, where the outside winter temperatures were low enough to freeze water rapidly. These plants have long since been discontinued, (Laramie was the last - closed in 1950), but while in operation, water was pumped into ponds where it was allowed to freeze to a depth of about 12 ins., after which the ice was sawed in blocks by use of teams of horses, and floated through channels to the ice house where it was stored awaiting the next summer's demands. The following pictures illustrate these operations.



EARLY HORSE-DRAWN SAW CUTTING NATURAL ICE
CARLIN, NEV.



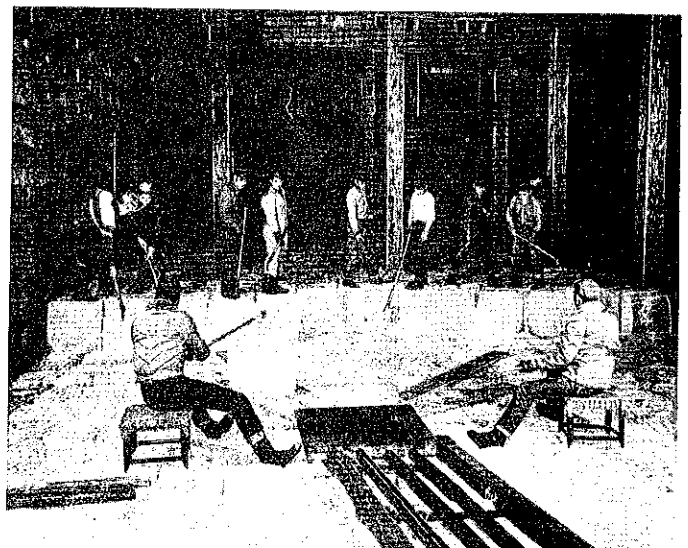
LATER GASOLINE-POWERED SAW - LARAMIE, WYO.



MOVING ICE FROM POND - LARAMIE, WYO.



FLOATING ICE CAKES THROUGH
CHANNEL TO STORAGE HOUSE - LARAMIE, WYO.



STORING ICE

At most locations it was necessary to manufacture ice by providing an artificial means of freezing water. The method used by PFE was not unique except for the sheer size of the operation. In its highest year (1946) PFE used over 2,500,000 tons of ice in icing of cars at its many locations. In 1966 only 740,000 tons were used, indicating the impact of the mechanical refrigeration age in rail equipment.

In the following picture can be seen one of PFE's older ice plants and icing facilities at Wallula, Wash. Operations at this plant were discontinued in 1951 when the McNary Dam was constructed and it is now under the waters of that dam. The long spidery looking structure next to the plant buildings proper is referred to as an icing platform. As a train of reefers was spotted on a track adjacent to this platform, the ice, in 300 to 400 lb. blocks, was moved along the platform, broken up into smaller chunks of about 50 lbs. each, and dumped into the hatchways of the bunkers.

Ice was moved from the storerooms of the ice plant to the platform by means of mechanical conveyors. As noted above, when the ice reached the cars to be used, it was necessary for large crews of icemen to break these blocks into small chunks and manually push them into the bunkers of the cars, adding salt according to instructions.

In later years mechanical icing machines were developed. In this case the ice is brought to the machine by means of a conveyor, the machine scoops up the large cakes, breaks them into the size chunks desired, and spews them out through a chute, through the hatchways, into the bunkers of the cars. Not only is this more efficient but it also substantially reduces the length of time necessary to ice a train. Speed is very essential in the movement of perishables to markets and PFE and its Parent Companies have always used the latest tools and machinery to accomplish this result.

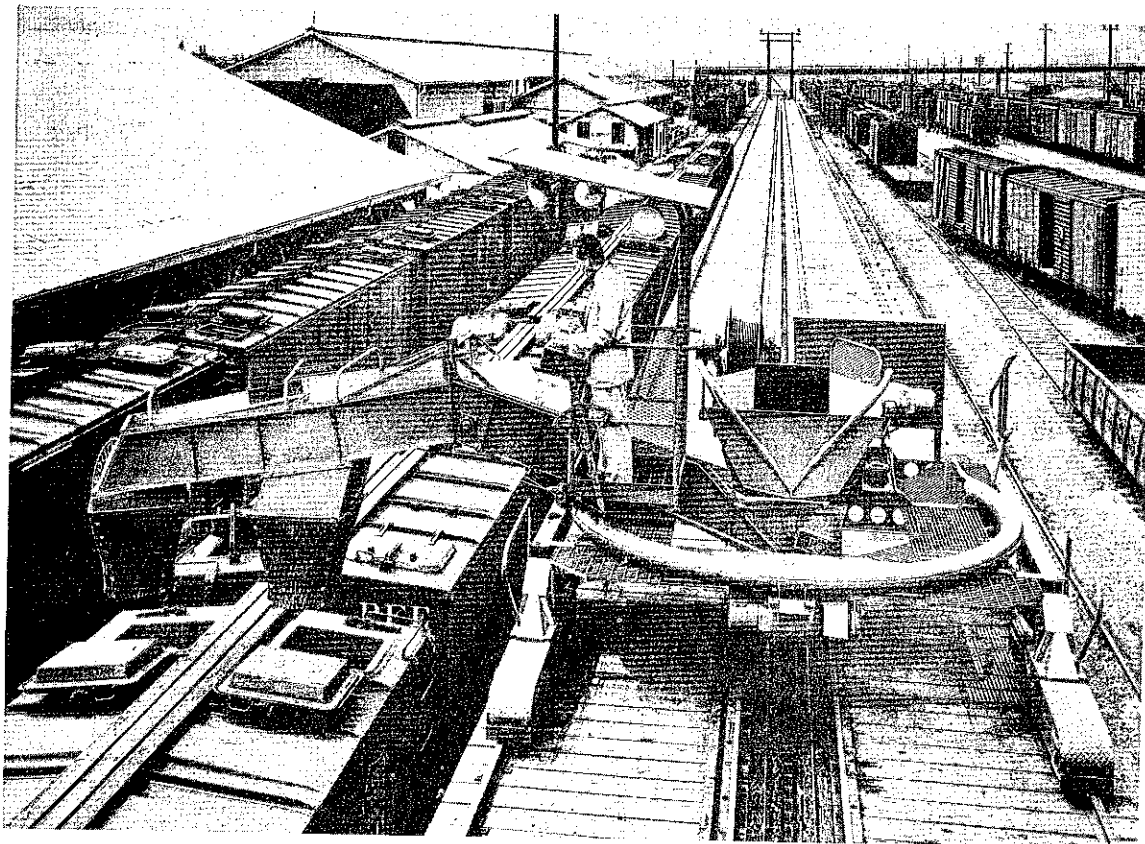


ICE PLANT AND PLATFORM - WALLULA, WASH.

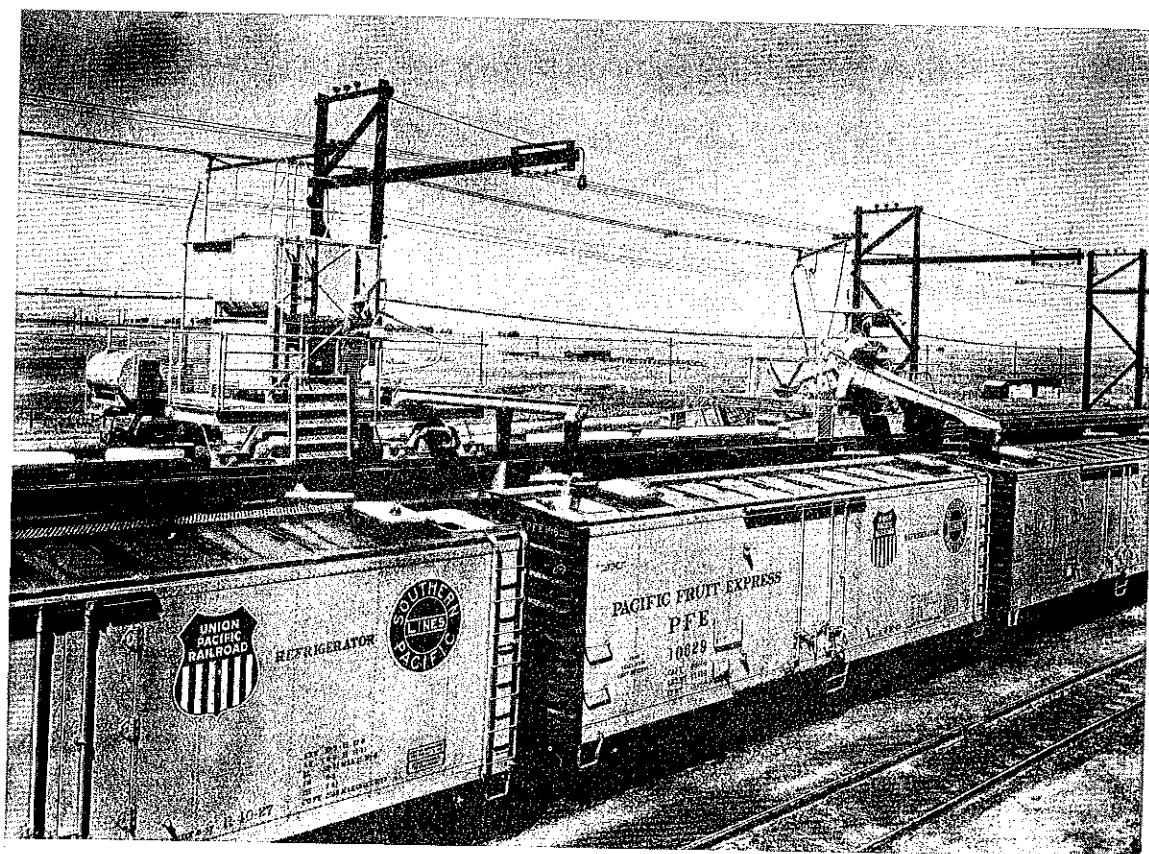
Shown next is partial view of the ice manufacturing plant and platform at Roseville, California, with a string of 'icers' next to the platform. On top of the platform are blocks of ice moving along the conveyor line to an icing machine. Also shown is another view of the Roseville icing deck with a mechanical icing machine in operation at the right of the photograph; at the left is an automatic salting machine metering salt from the hopper shown on top of the machine through a piping arrangement to the bunkers of cars.

During the winter when outside temperatures drop to a point below that desired for the best protec-

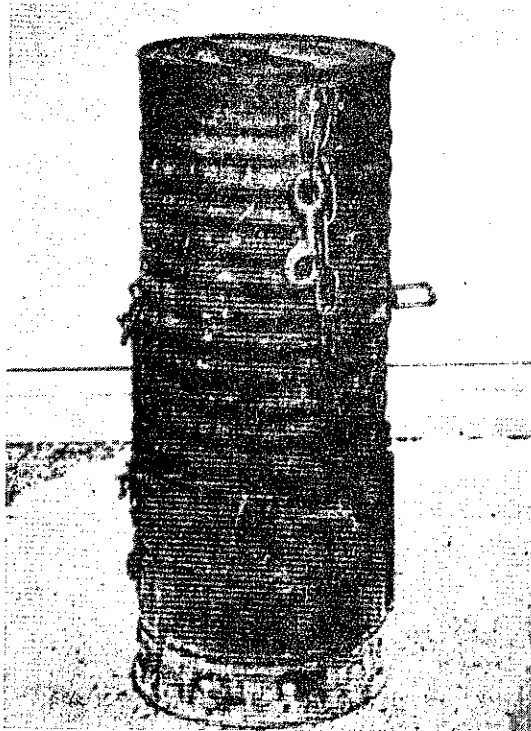
tion and preservation of perishable foodstuffs, it is frequently necessary to provide heat rather than refrigeration. At first, this was accomplished by installing small charcoal burning heaters in the car's bunkers. These heaters required manual operation to light or extinguish them at in-transit inspection points on the basis of weather forecasts. Subsequently, PFE developed an automatic heater using alcohol or methanol as a fuel, with pilot light and thermostatic control which would light or extinguish the main burner on the basis of temperature inside the car. These heaters are all chained in position in the car bunkers to prevent their tipping over.



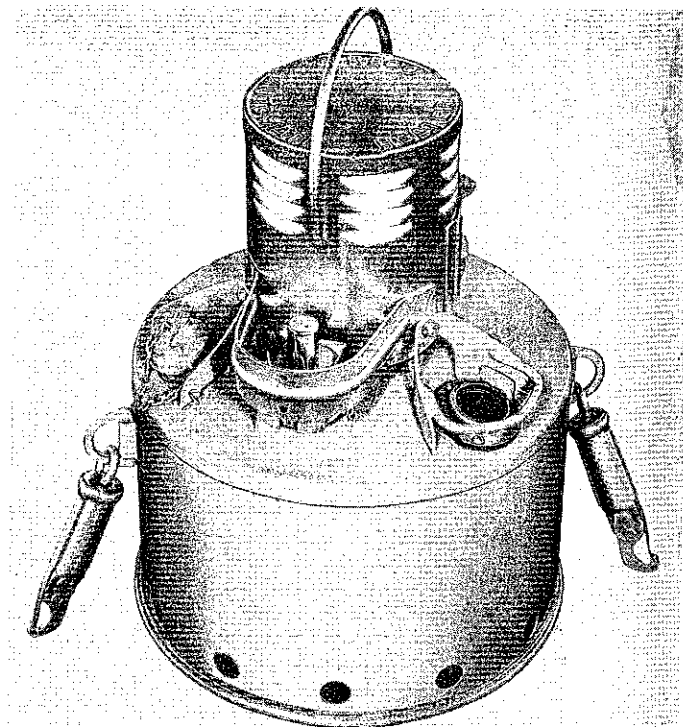
MECHANICAL ICING MACHINE



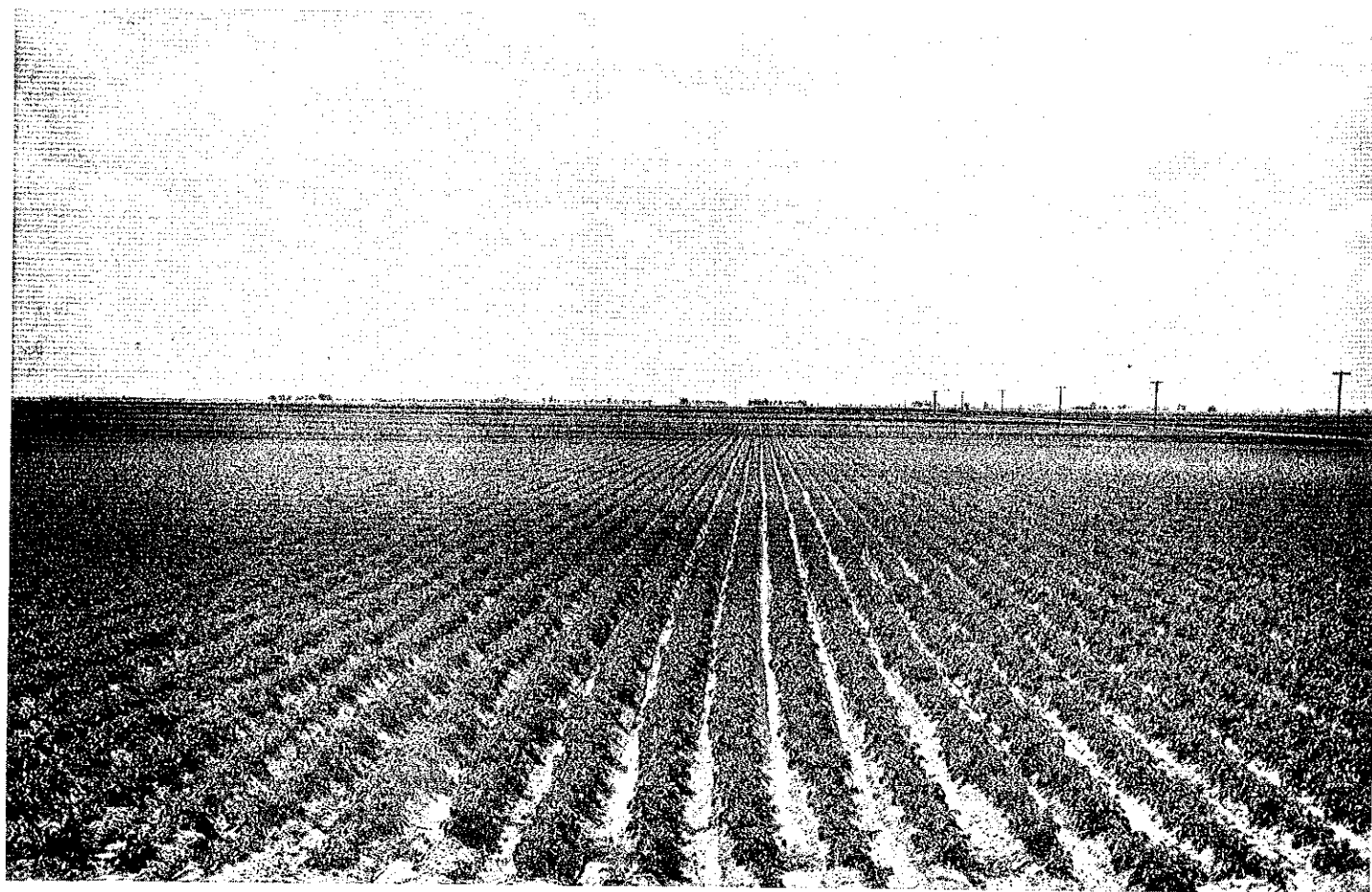
ICING AND SALTING CARS - ROSEVILLE, CALIF.



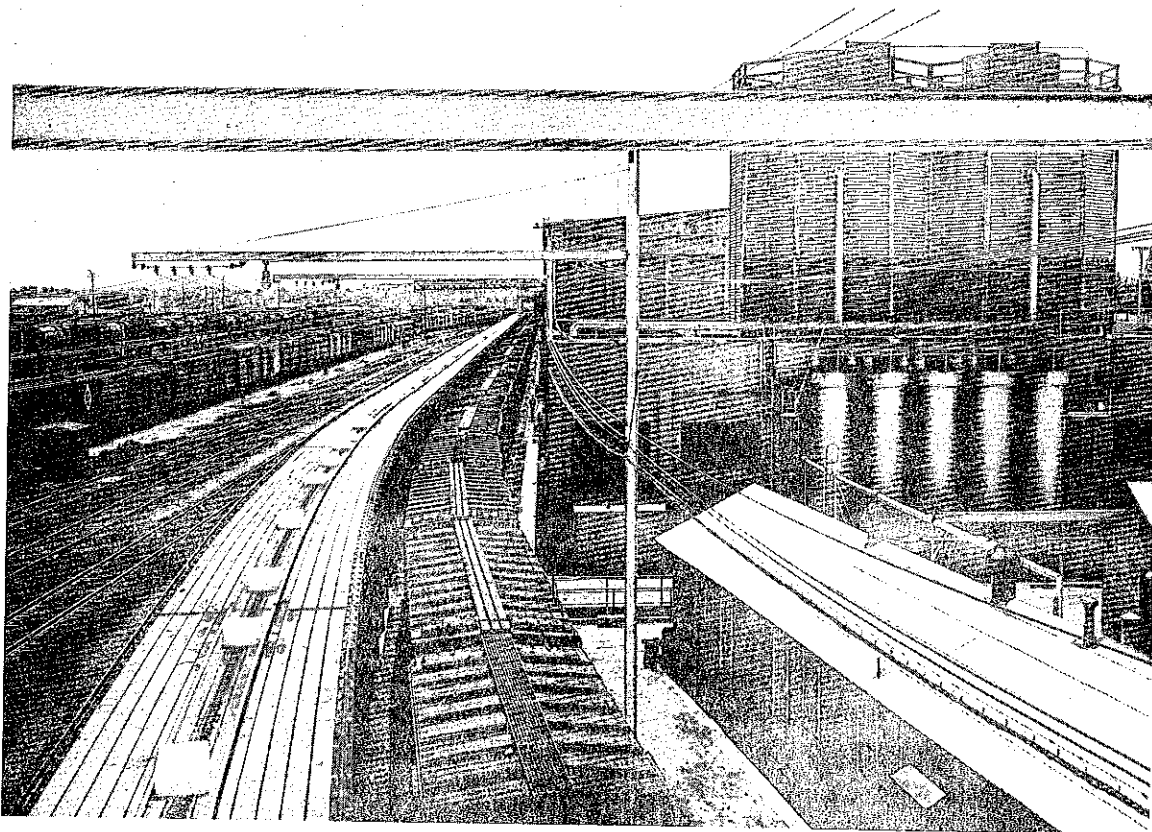
CHARCOAL-BURNING CAR HEATER



AUTOMATIC ALCOHOL-BURNING HEATER



FIELD OF POTATOES. IDAHO AND CALIFORNIA ARE THE HEAVIEST POTATO PRODUCING AREAS SERVED BY PFE.



ICE DECK - ROSEVILLE, CALIF.

One of the last ice bunker cars PFE acquired was PFE 11702, built in 1957 and called the R-40-28 class. It was similar in most respects to the previous car but was equipped with a combination 6-ft. sliding door and 2-ft. hinged door instead of the previously used 6-ft. sliding door only. This increase in width was designed to permit unlimited use of lift trucks and other efficient loading methods. This car has 6 ins. of insulation - 3 ins. of fiberglass blanket combined with

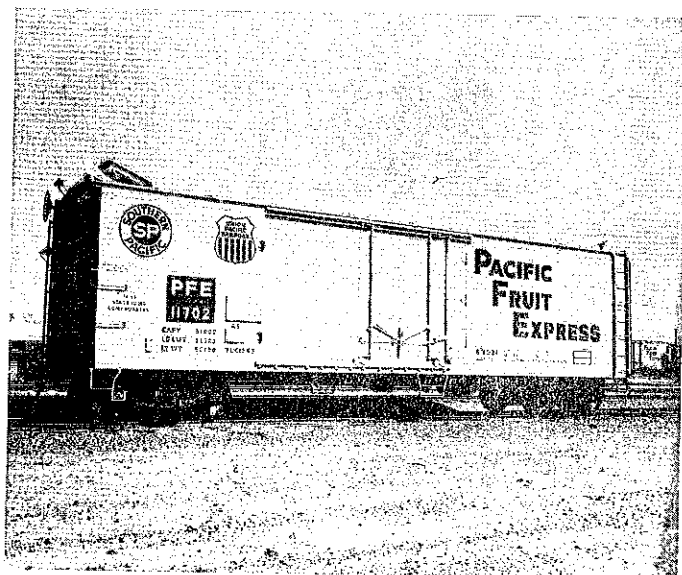
3 ins. of alternate laminations of corrugated reflective foil and glass fiber.

Some shipments do not require the use of ice in the bunkers of the car and in these cases that space occupied by the bunkers was normally wasted. These cars were built with 'convertible' bulkheads which, when ice bunkers were not to be used, could be moved to the ends of the car, thereby enlarging the lading space some 17%.

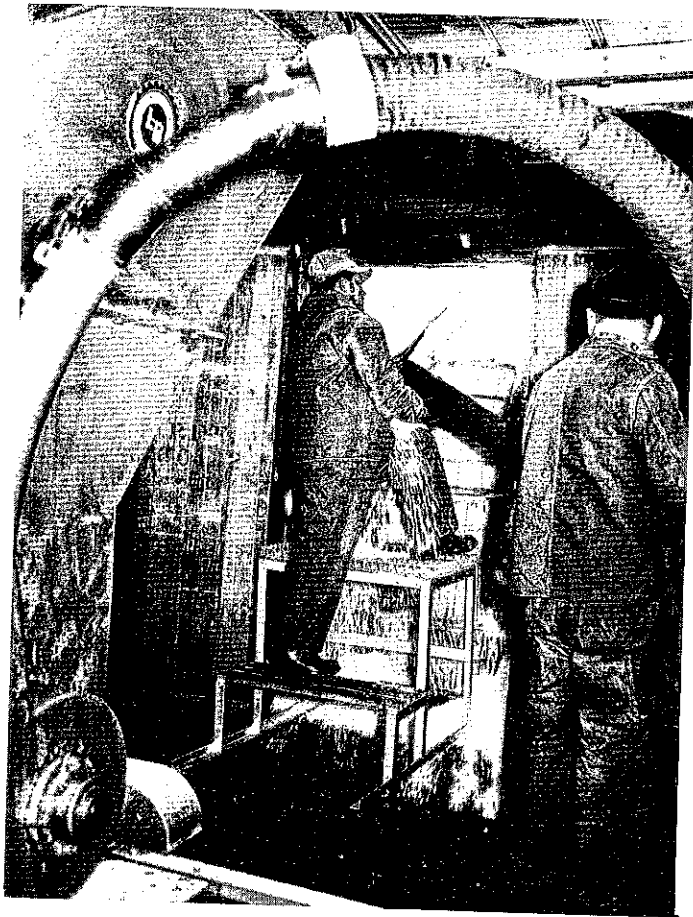
In many vegetable shipments and on some melon shipments, top ice may be used on top of the load, even though bunker ice may or may not be used. Top ice is finely crushed and blown through hoses over the entire load of perishables, by shipper, at origin. It serves not only to provide quick cooling and refrigeration but also, in melting, provides heavy moisture content over certain vegetables needing that condition during the transit period.

Shippers have found that the more quickly their commodities are cooled to the temperature desired, the better are the chances of preserving their freshness and shelf life. Therefore, more and more shippers are precooling their commodities before loading and this practice greatly reduces the need for top ice and subsequent retopping.

Lettuce in particular was almost universally topped a few years ago. With the advent of vacuum-cooling, where the product is quickly brought to a temperature of around 32°, it was found top ice was no longer needed for this commodity when



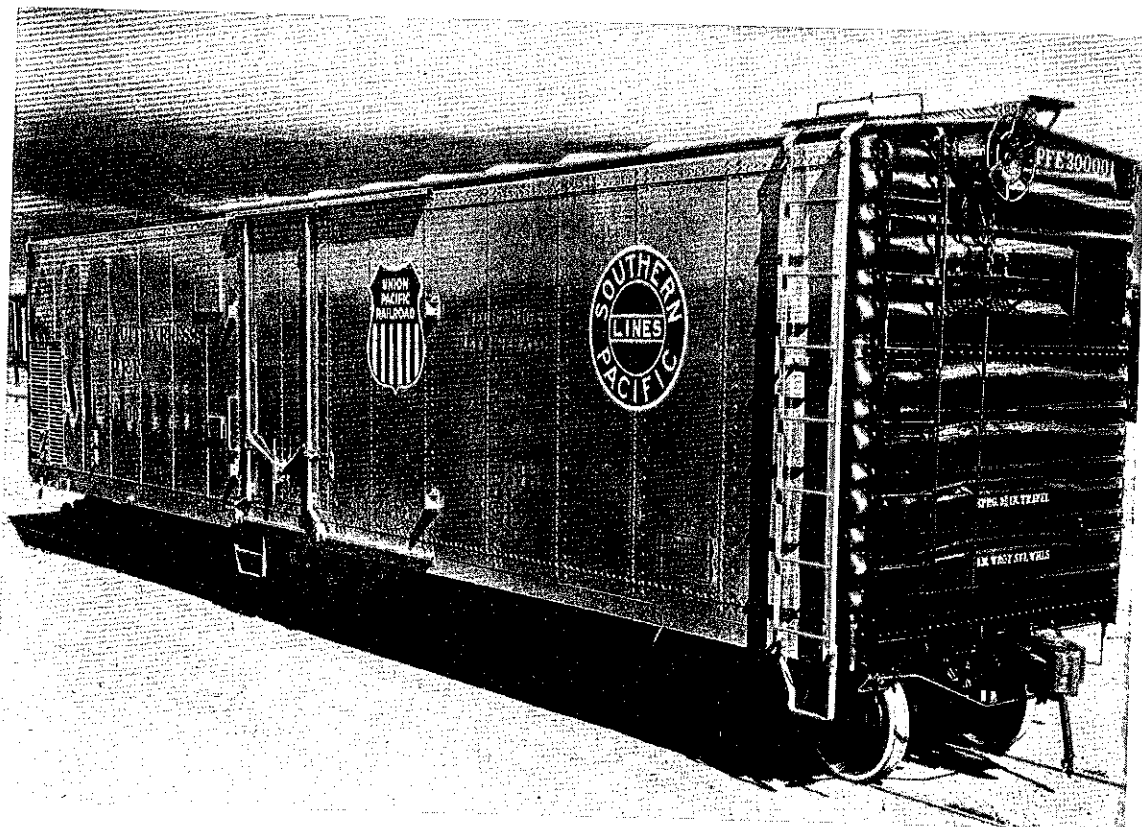
END OF THE LINE FOR ICE CARS



RETOP ICING. ICE IS FINELY CRUSHED IN MACHINE AT LEFT AND BLOWN THROUGH LARGE HOSE INTO CAR ON TOP OF LOAD.

shipped under mechanical refrigeration where positive controlled temperatures can be maintained.

As previously mentioned, although reasonably low, near zero, temperatures could be obtained with ice and a heavy proportion of salt, this was not considered completely satisfactory for protecting frozen foods as it was determined car interior air temperatures of zero or below were desirable to provide optimum protection. In 1952, primarily for furnishing protection to frozen foods, means had finally been found of making it practical to install mechanical refrigeration systems in railroad cars, which mechanical systems were sufficiently reliable to continue operating and functioning without constant attention. These mechanical systems could provide an interior car air temperature of zero or lower if desired and hold the commodity at these recommended temperatures. Subsequently, as more mechanical cars were acquired, they were used in test shipments for other than frozen food loads and found to be superior to the ice car for other commodities as well. So, although the mechanical car was originally developed for transporting frozen foods and still is the only practical means of transportation for this commodity, its use has become increasingly popular for almost all other perishable commodities and eventually will completely supplant the use of ice cars. PFE acquired its first mechanical cars in 1953, illustrated in following picture.



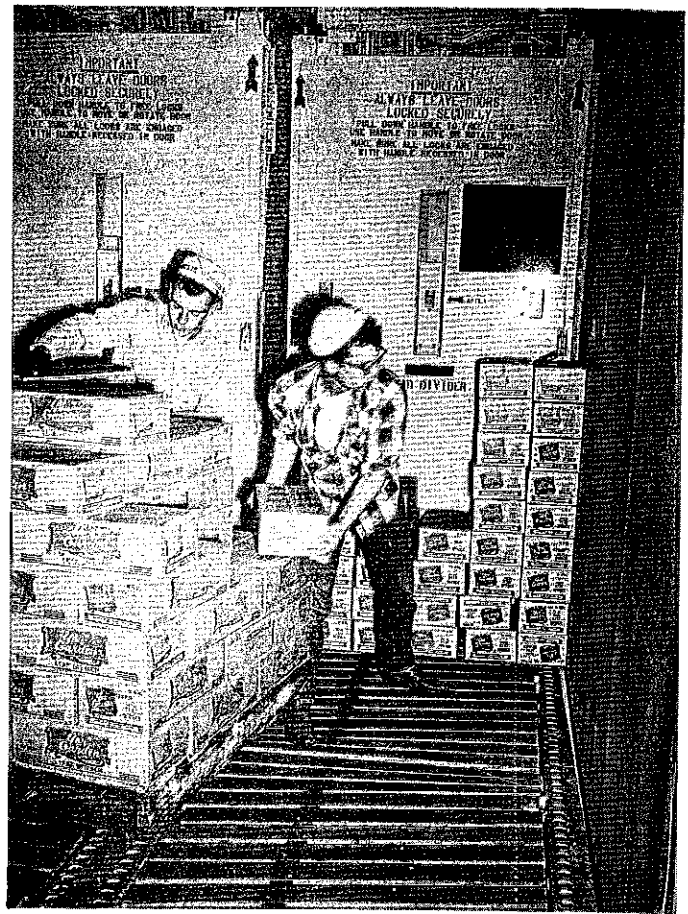
FIRST PFE MECHANICAL CAR

Instead of ice bunkers installed in each end of the car, a compartment is provided at one end housing a diesel engine driving a generator to produce electrical power which, subject to the control panel and thermostat demands, is used to operate an electric motor to drive a refrigeration compressor for the compression of the refrigerant from a gaseous state to a liquid. The liquid refrigerant is circulated through a set of compressor coils through which outside air is blown to remove the heat created by the compression. The then cooled and compressed refrigerant is circulated to an evaporator coil where it is allowed to expand from its compressed liquid state to an evaporated gaseous state. During this expansion great amounts of heat are absorbed, cooling the fins of the evaporator. The interior car air is sucked up through and around the evaporator coils by electric fans, allowing the refrigerant to absorb the heat in the car that comes from outside the car through the car walls, and the heat generated by the commodity itself. This now cooled interior air is then circulated by blower fans throughout the lading compartment to provide even distribution of refrigeration to the lading.

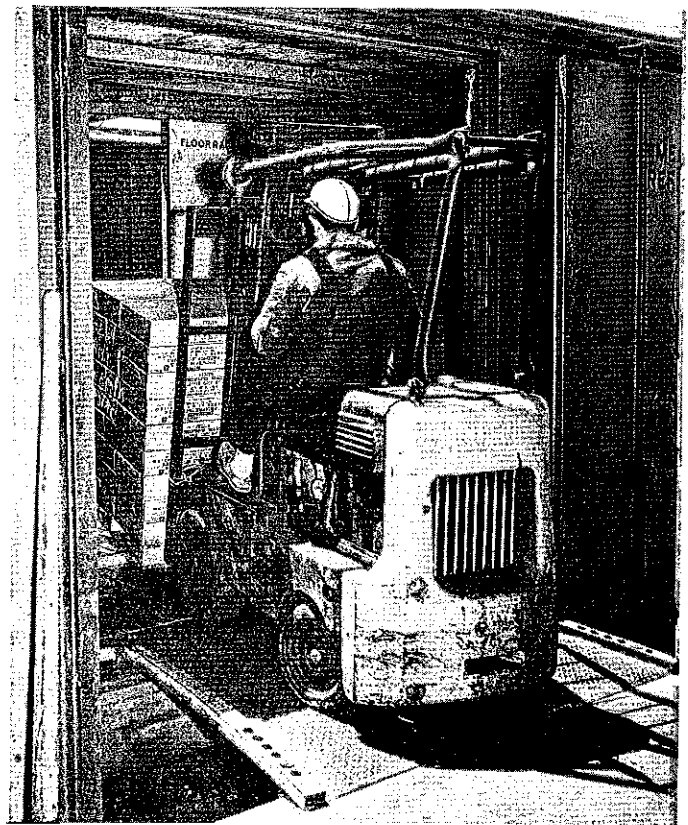
In the first mechanical cars, developed solely for transportation of frozen foods, 'envelope type' construction was used. In this case the lading compartment of car was actually a separate compartment within the car, with an air space around the walls, ceiling and floor of the lading compartment. The air within this space was passed through or around the evaporator coils, thereby being cooled, and returned to this envelope space. The cooled air in these cars never actually entered the lading compartment at all but was merely circulated around it. The reason for this was that frozen foods are loaded into cars at optimum temperature desired and no further temperature reduction is necessary. The sole purpose of refrigeration in this case was to offset the heat permeating the car walls and insulation. Subsequently, when these cars were used for fresh commodities still containing field heat and at a temperature higher than the final desired temperature, the refrigeration unit was required to remove such excess heat. Also, such fresh commodities, through continued respiration produced their own heat and this also had to be removed by the refrigeration system. Circulating the air around the envelope and not allowing it to come into contact with the produce was not completely effective. Removing the envelope from the car and allowing the cool air to be circulated throughout the lading compartment, provided an efficient means of removing both the field heat and the heat of respiration.

A thermostat located below the evaporator measures temperatures of air returning from the lading compartment and when they rise above the predetermined desired point, signals the refrigeration unit to go into operation. The diesel engine runs continuously on high or low speed, depending upon the amount of refrigeration or heat desired; the control panel cuts off the flow of electricity to the compressor motor when the proper refrigeration is satisfied as determined by the thermostat.

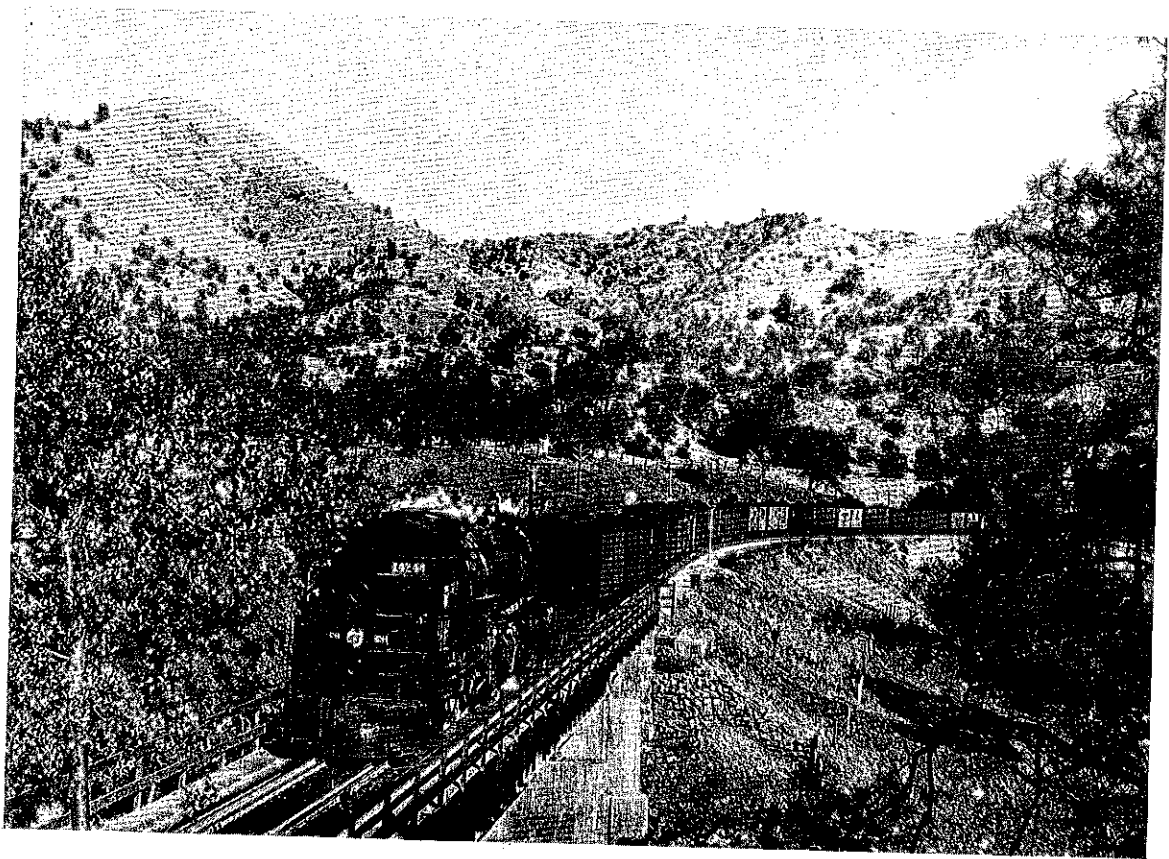
When heater service is necessary, the same electrical power is available for the operation of



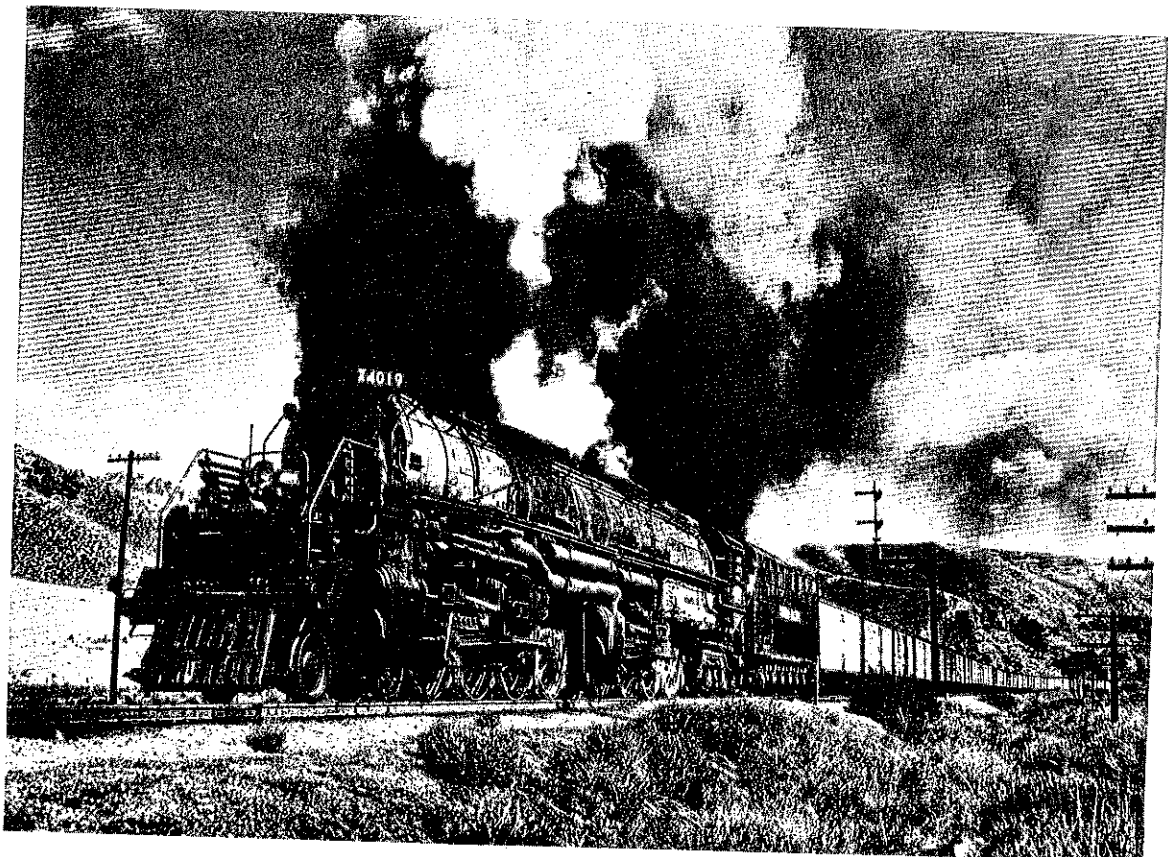
LOADING CAR WITH FROZEN SPINACH. NOTE LOAD DIVIDER GATES IN STAGGERED POSITION.



WIDE DOORWAY PERMITS USE OF LIFT TRUCK IN LOADING CAR WITH FROZEN PINEAPPLE JUICE CONCENTRATE.



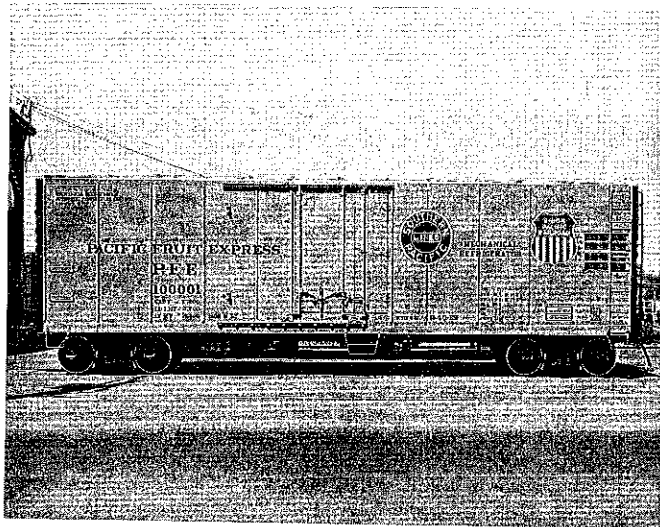
ONE OF SOUTHERN PACIFIC'S FAMOUS CAB-IN-FRONT LOCOMOTIVES PULLING A STRING OF REFRIGERATOR CARS, SOME WITH VENTILATORS OPEN, UP A GRADE NEAR THE TEHACHAPI LOOP IN SOUTHERN CALIFORNIA.



ONE OF UNION PACIFIC'S FAMOUS "BIG BOY" STEAM LOCOMOTIVES PULLING A STRING OF REEFERS THROUGH WEBER CANYON, UTAH. THIS LOCOMOTIVE WAS THE LARGEST RAILROAD LOCOMOTIVE EVER BUILT.

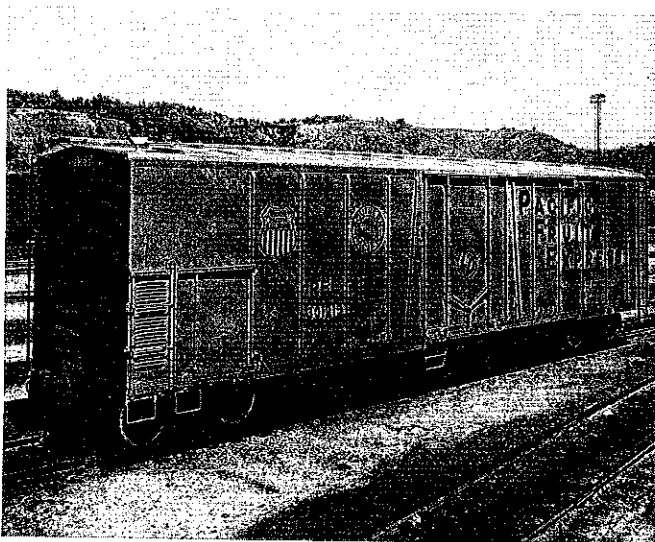
heating elements to warm the interior car temperature, subject to the demands and control of the thermostat setting. As previously stated, air is circulated throughout the car and through the evaporator coils or heater elements by constantly operating fans powered from the electricity from the diesel-generator unit.

While the vast majority of PFE's mechanical cars are 50-ft. in length or over, 500 cars of 40-ft. length were built in 1957, pictured below.



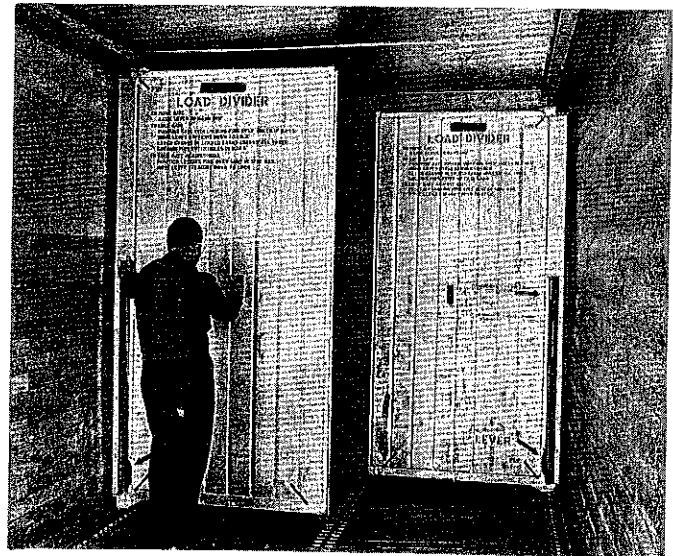
40-FT. MECHANICAL CAR

This new method of refrigerating railroad cars started a revolution in perishable handling among all transportation companies, and in recent years PFE has concentrated its acquisitions of new equipment on mechanical cars and refrigerated trailers, and is now gradually phasing out its ice car equipment as it becomes obsolete and worn-out, and also its unneeded ice plants and icing facilities.



1960 MECHANICAL CAR

In 1960 PFE constructed a series of larger mechanical cars with 8-ft. sliding doors and load dividers or movable gates in the interior of the lading compartment. There are 4 individual gates in the car and they may be set at any location desired by the shipper. They are used to hold the load in place and prevent shifting, thus substantially reducing damage to cargo.

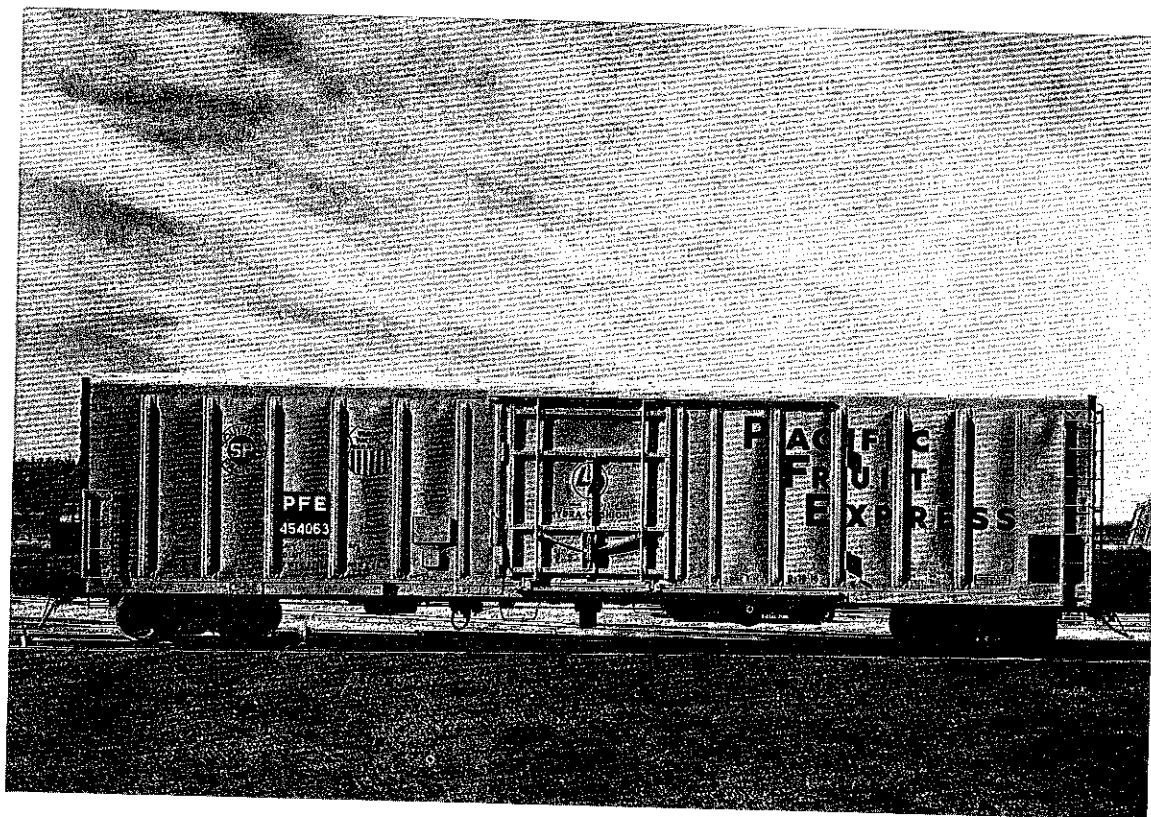


LOAD PROTECTION DEVICES IN MECHANICAL CAR

In 1963 PFE embarked upon a program of acquiring wider, higher and longer mechanical cars to chamber larger and heavier loads to enable shippers and receivers to take advantage of incentive and per car rates instituted by PFE's Parent Lines and other railroads, and has standardized on this longer and improved car in its acquisitions since that date. The cut at top of next page shows PFE 454063 built in 1966, which is very similar to all cars built since 1963.

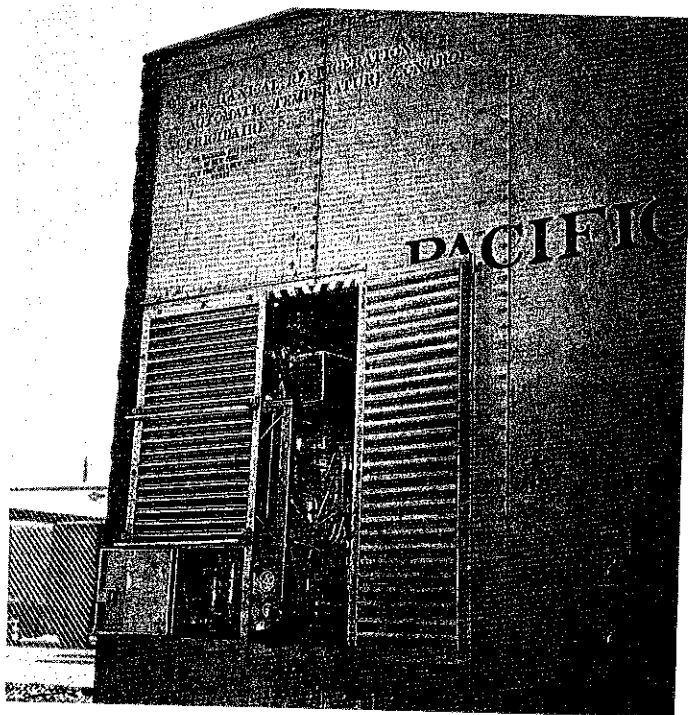
This car is 57-ft. long on the outside with a loading compartment that is 50-ft. long, 9-ft. wide and 8-ft. 11-in. in height, and has a capacity of over 4,000 cu. ft. It will carry a load of well over 130,000 lbs., is equipped with cushioned underframes to absorb shocks, roller bearings for continuous high speed, extra wide 9-ft. doors to facilitate use of lift trucks, and load protection devices or load dividers.

These new cars are of steel construction. They are insulated with foamed-in-place polyurethane - 5 in. in the walls and roof and 4 in. in the floor. The interiors of the car are lined with preformed corrugated fiberglass reinforced plastic panels which never need painting and always look clean and fresh.



HIGH-CUBE MECHANICAL REFRIGERATOR CAR

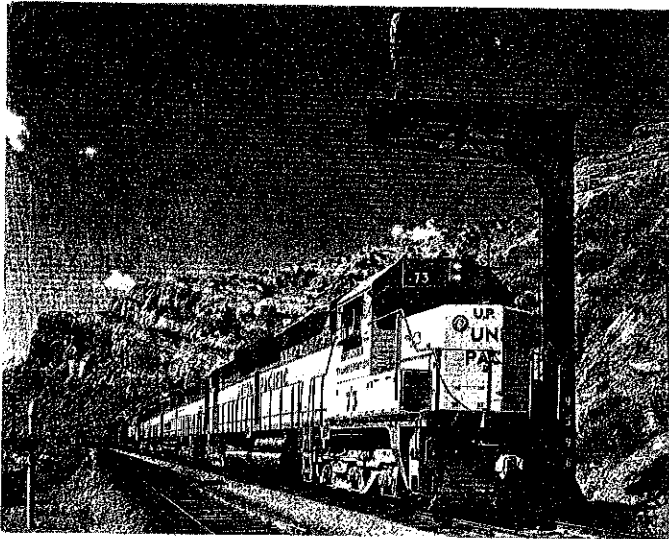
The mechanical refrigeration units are capable of producing and maintaining any predetermined temperature from well below zero to 700 above, as necessary for the protection of the commodity. The diesel fuel tank holds a sufficient supply of fuel for the longest journey without requiring in-transit refueling. Following picture shows a typical mechanical unit in its engine compartment.



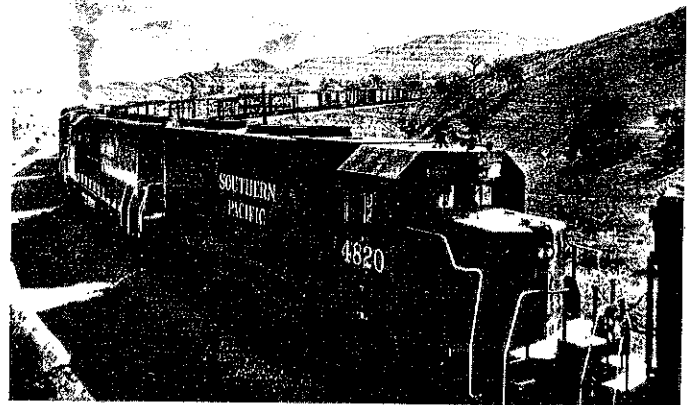
The majority of perishables move from the Western territory to Midwestern and Eastern metropolitan centers. As there is relatively little perishable shipping in the reverse direction, PFE people working with the railroads endeavor to find west-bound loadings of non-perishable commodities for these cars in order to avoid the expensive necessity of returning them empty to the West for further perishable loads. After perishables have been unloaded, cars refrigerated by ice usually have some ice remaining in the bunkers and the interiors are damp and less suitable for many types of dry freight loadings, so that a relatively high percentage of such ice cars have always returned west empty regardless of all efforts to secure loadings.

With the advent of mechanical cars, and especially the latest and larger cars acquired in 1963 and since, the advantages of using reefers for general freight loadings have greatly multiplied. Mechanical cars are dry, provide a commodious lading compartment with all the latest devices for protecting even the most fragile commodities, and are in very popular demand for westbound general dry or 'dead' freight loading. This greater utilization of reefer equipment is of major value in enabling the railroads to maintain the lowest transcontinental shipping rates possible in spite of rising costs of labor, materials and other supplies.

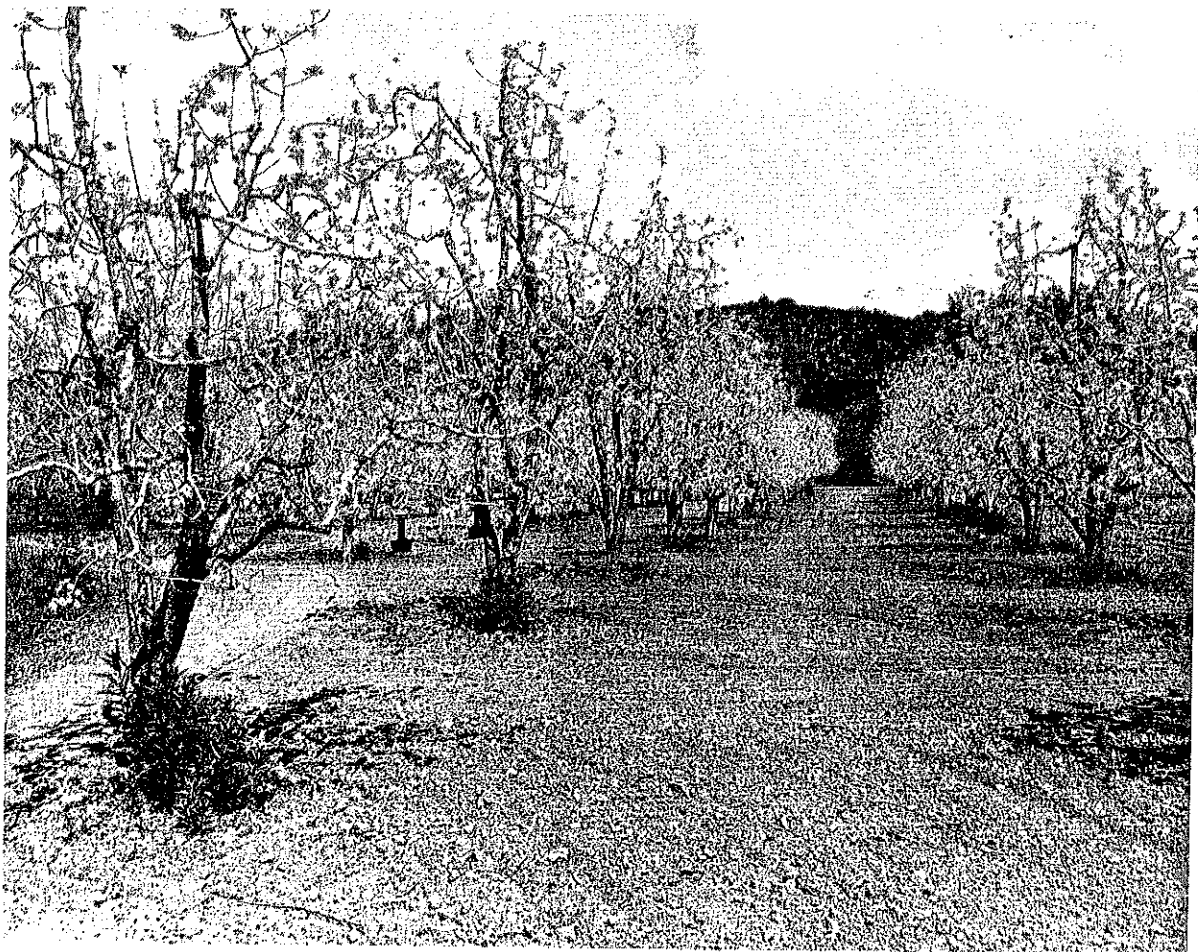
To pull these modern refrigerator cars and piggyback trailers mentioned hereafter, Parent Lines of PFE have the most modern diesel-electric locomotives available, as depicted in following photos;



UP DIESEL-ELECTRIC LOCOMOTIVE



SP DIESEL-ELECTRIC LOCOMOTIVE

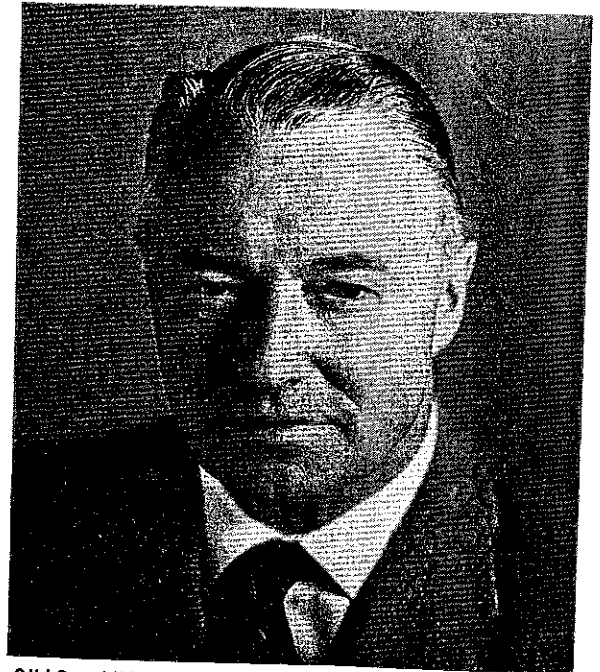


CALIFORNIA PEAR ORCHARD IN FULL BLOOM. SOME ONE-HALF
OF THE NATION'S PEARS ARE GROWN IN CALIFORNIA.

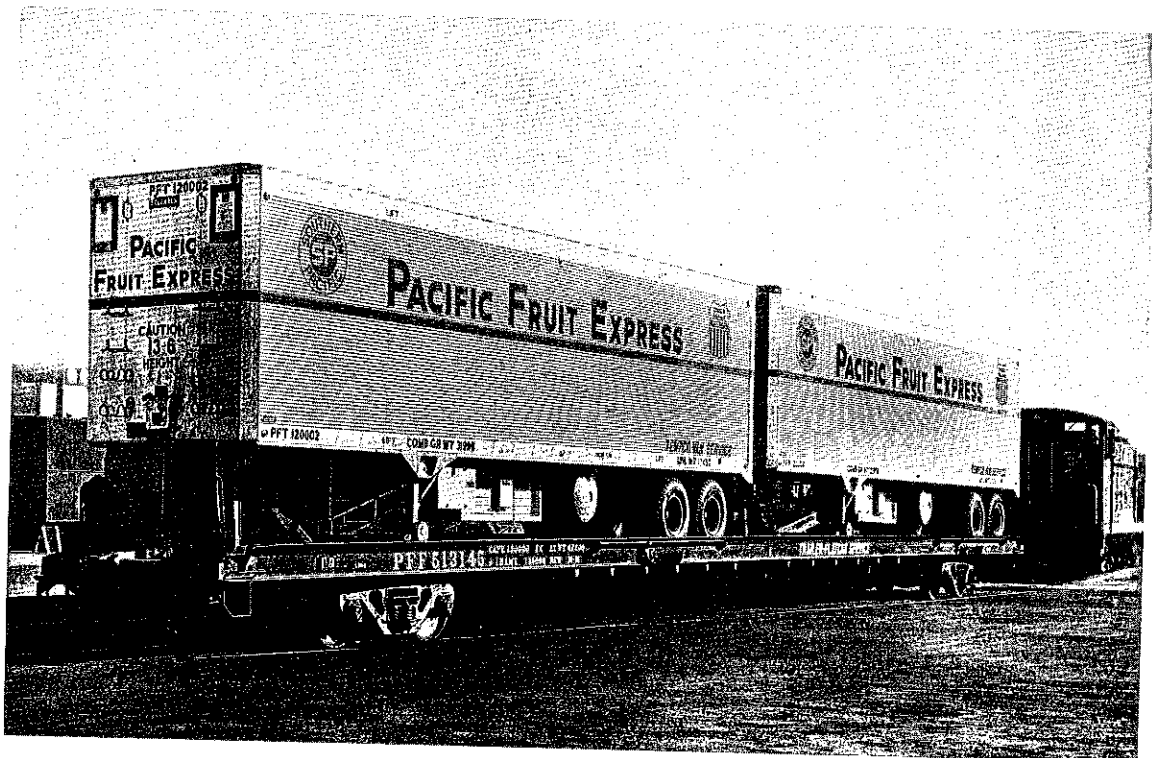
PFE still maintains a number of ice manufacturing plants and icing platforms for icing cars requiring this service. With the swing to mechanical refrigeration, the importance of icing facilities is becoming less and less and this will continue as the ice bunker cars are retired. However, some of these same facilities, and in some cases new facilities, are needed and used for the inspection and in-transit servicing of mechanical refrigeration units. PFE operates many such inspection and servicing facilities at strategic points on the SP and UP lines throughout the West.

Another progressive change in the mode of transporting perishables occurred in 1961 when PFE acquired and placed in operation piggyback refrigerated trailers for Trailer-on-Flatcar service (TOFC). In railroad operation, two of these trailers are placed on a railroad flatcar and transported over the rails. At origin points, highway tractors are hooked on the trailers and pull them over the road to and from the shippers' loading sheds, back to the railroad ramp, and from the railroad ramp at destinations to the receivers' sheds or warehouses. Also illustrated is one of these new trailers, PFE 160450, recently acquired. This trailer, as are most PFE trailers, is 13 ft. 6 in. in outside height, 40 ft. long, has a lading compartment that is 37 ft. 10 in. long and contains 2,358 cu. ft. The trailer's loading capacity is 42,000 lbs.

The trailers are insulated with 3 in. of foamed-in-place polyurethane in the walls, roof and floor. They are equipped with 3 in. extruded aluminum floor rails, corrugated fiberglass reinforced plastic liners, and have adjustable or sliding wheel assemblies to permit equalization of the load over the tractor and trailer wheels to conform with highway regulations of various states.



CHAS. AHERN was Vice President & General Manager from March 1958 to June 1961. One of the important events during his tenure of office was his leadership and decision for PFE to enter the piggyback field by the acquisition of refrigerated trailers. Although his untimely death in June 1961 prevented him from seeing the fruition of his actions, he will be remembered as the one primarily responsible for this new mode of transportation for PFE.



TRAILERS ON FLATCAR



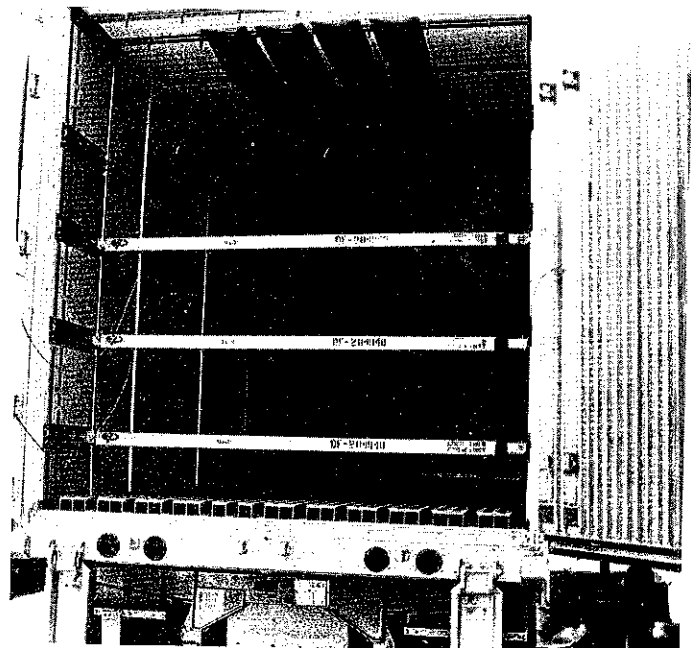
PIGGYBACK TRAILER/CONTAINER

The trailers are equipped with mechanical refrigeration units operated by a diesel engine, most are nose-mounted as pictured, others have units mounted under the trailer body. These units are also capable of producing and maintaining lading temperatures from below zero to plus 70° as predetermined and requested by the shipper and as required by the particular commodity carried. As may be noted in the picture, recent trailers acquired by PFE have prepainted white sidings and roofs. The aluminum sheets used in the construction are, prior to assembly, coated with a white acrylic enamel. This provides an improved reflectivity of the trailer walls and roof for more efficient insulation, and helps to keep the trailer clean and shiny-looking.

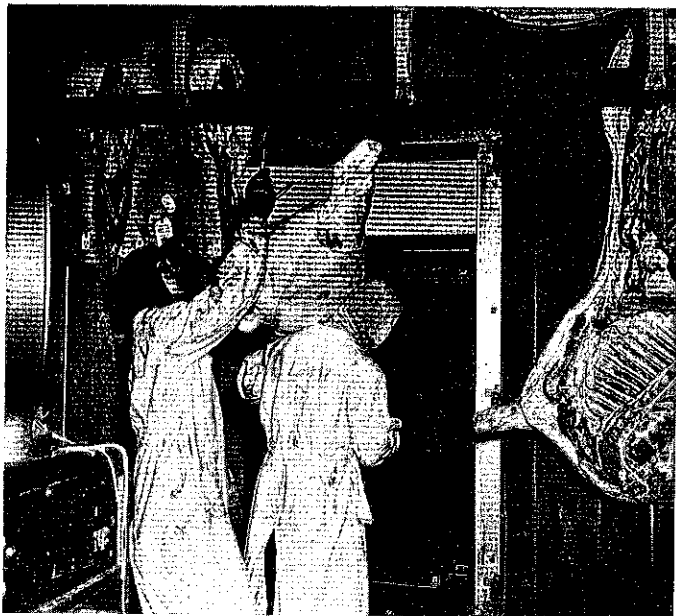
Trailers with nose-mounted mechanical units are also equipped for use as containers. In this case the wheel assemblies are removable and the landing gear or struts under the trailer at front are folded up under the trailer and it may be placed on a container flatcar, or aboard the deck of a ship and even conceivably in an airplane. Other trailers in PFE operation that have the mechanical units mounted underneath the trailer cannot be operated as containers.

Most PFE trailers, along with its newer rail cars, are equipped with load protection devices. In the illustration next shown is the rear of a PFE trailer with doors open and a set of 3 DF (damage free) bars installed across the door opening. These DF bars are attached to belt rails, located on each side of rear of trailer, with a travel adjustment of approximately 18 in. After the trailer is fully loaded, plywood sheets are usually placed against the rear of the load and then the

bars are placed in the belt rails and moved forward to press against the load and locked in place. This prevents the load from shifting and is of considerable assistance in reducing damage to the cargo. These devices, along with other features, make TOFC equipment highly desirable for westbound general merchandise loading and the greater proportion is so loaded.



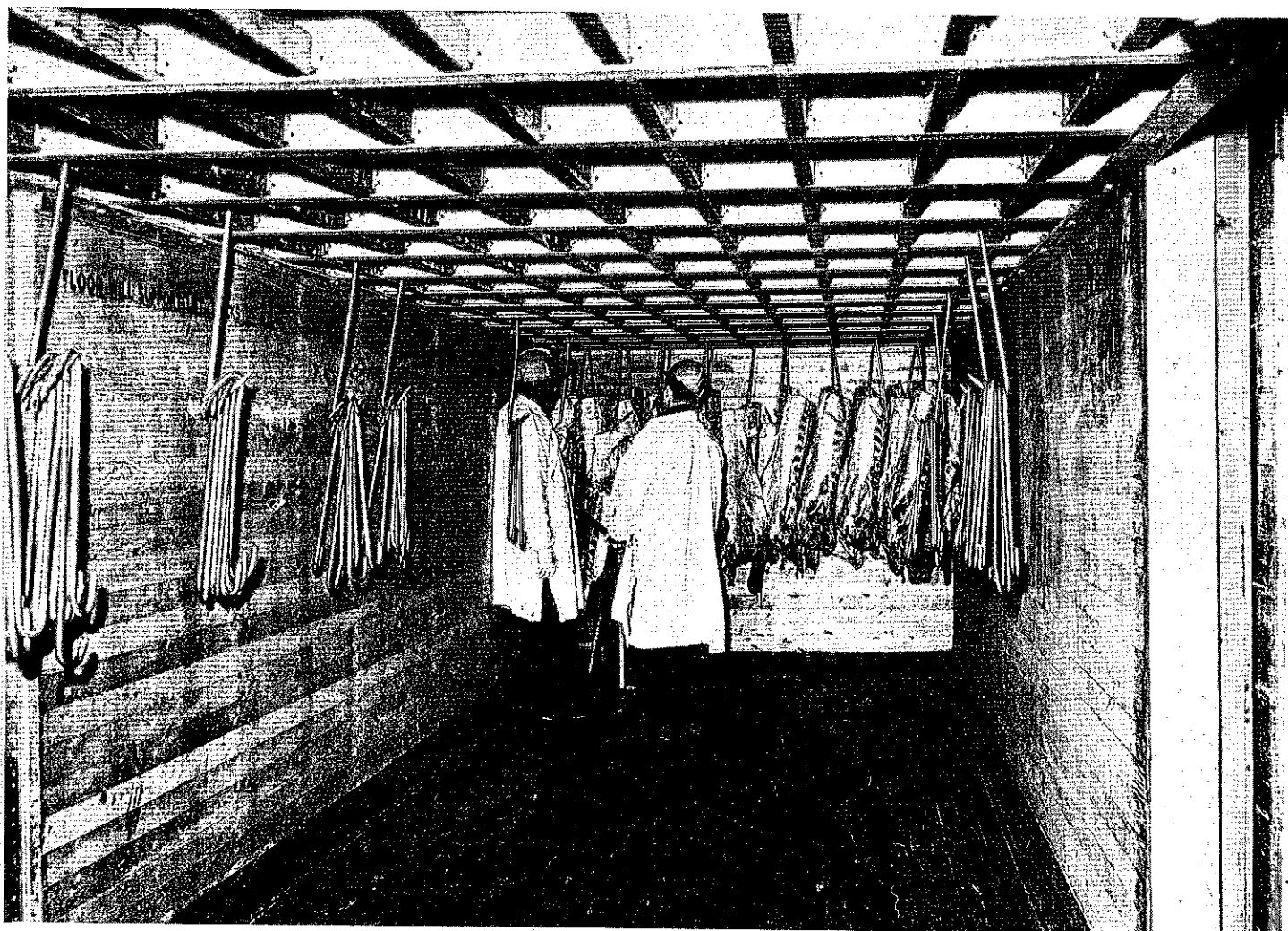
LOAD PROTECTION BARS IN TRAILERS



BEEF QUARTERS BEING LOADED INTO TRAILER



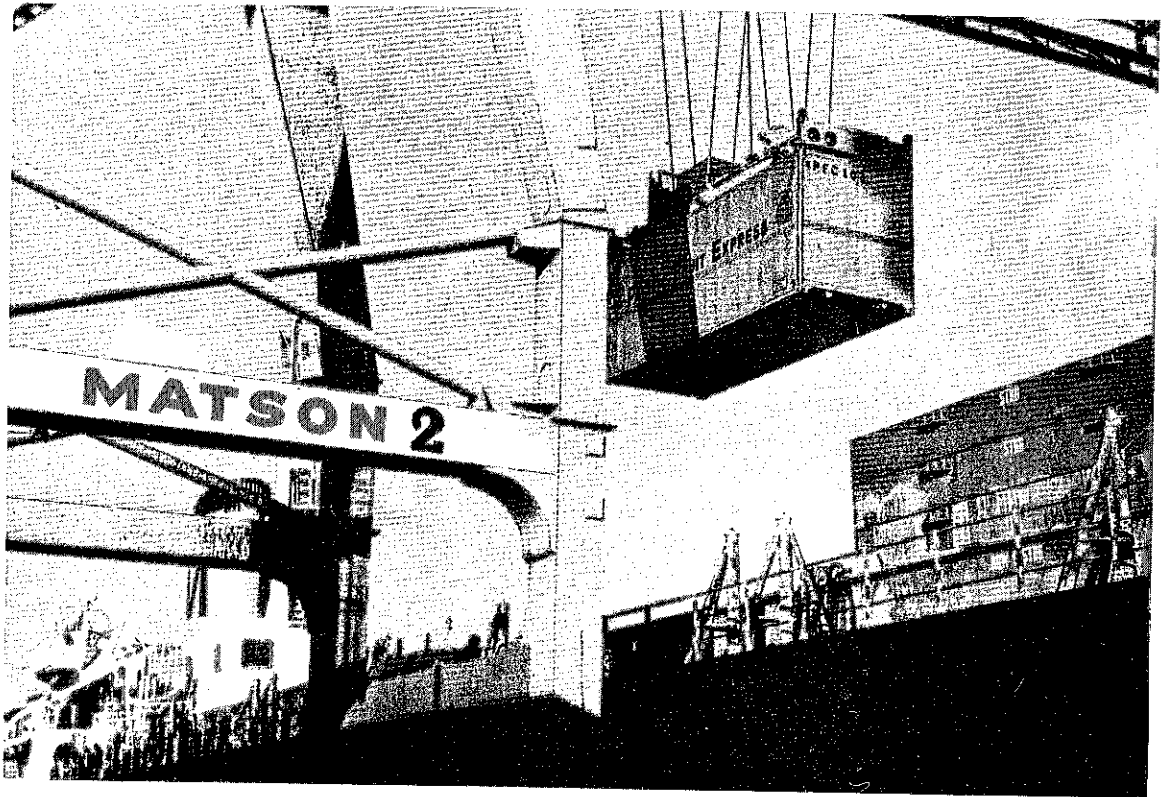
LOADING LETTUCE IN PFE CAR AT SALINAS, CALIF.
USE OF CONVEYORS IS EFFICIENT AND FAST



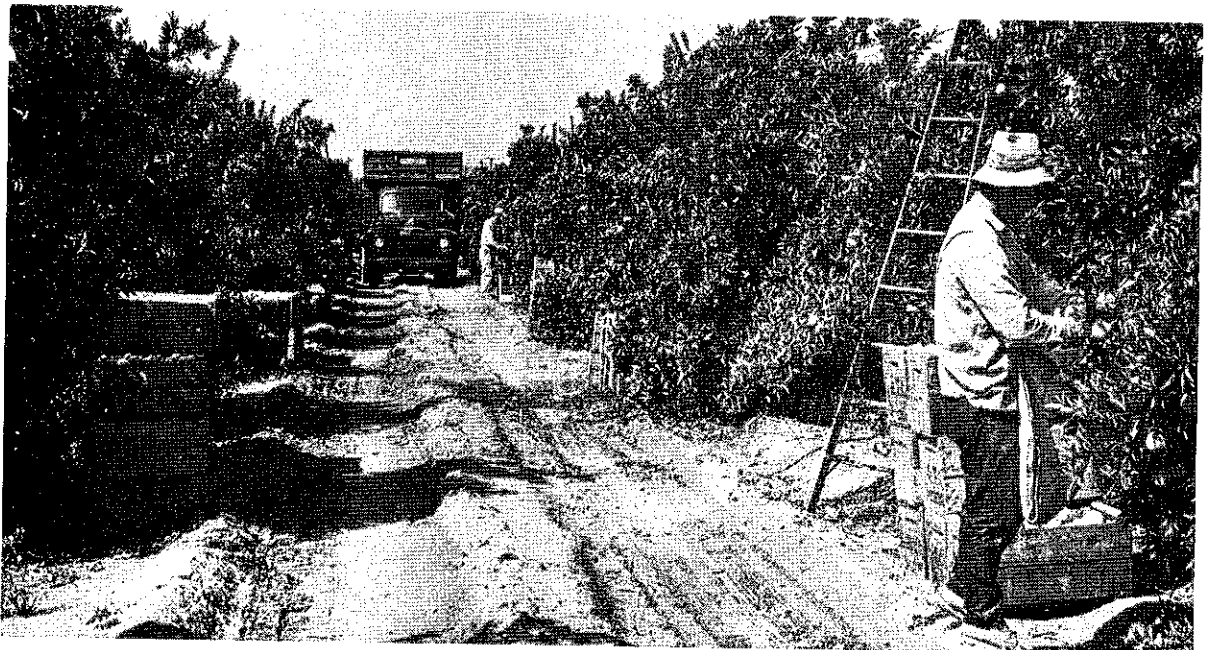
LOADING HANGING BEEF IN REFRIGERATOR CAR, USING MEAT HOOKS

In 1964 another new form of transportation was undertaken by PFE with the acquisition of 24-ft. insulated containers. These containers are used for the shipment of canned pineapple from the Hawaiian Islands aboard Matson Navigation Company ships. At ports, they are transferred to rail flatcars, three to a car, and hauled over the rails to inland U.S. points. When they arrive at destination they are removed from the flatcar by a crane and placed aboard a flatbed trailer or

chassis especially designed for these containers and moved by tractor over the road to receivers' warehouses. After the eastbound canned pineapple has been unloaded, Hawaii-bound freight is loaded into the containers and they are then moved in reverse fashion through to Hawaii. These containers are insulated with 2 in. of foamed-in-place polyurethane, are all aluminum construction except for steel frame members, but do not carry refrigeration units.



24-FT. CONTAINER BEING HOISTED ABOARD SHIP



MUCH HARVEST LABOR IS REQUIRED IN CITRUS GROVES



CALIFORNIA PRODUCES SOME 60% OF THE LETTUCE GROWN IN THE U.S. AND SALINAS ABOUT HALF OF THAT - WHICH IS WHY SALINAS IS CALLED THE "SALAD BOWL OF THE U.S." ARIZONA IS NEXT WITH 25%

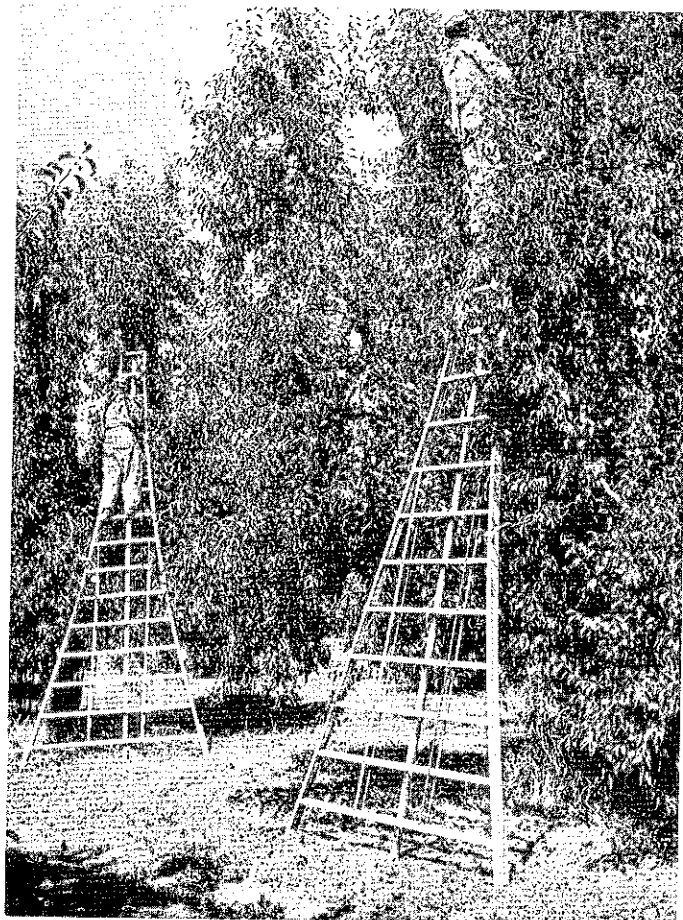
In the protection and transportation of perishables, until very recently, refrigeration was the only practical means of delaying the ripening of the commodities and retarding the growth of mold, bacteria and other decay-causing organisms. A new system has now been developed to supplement, but not supplant, refrigeration and is called controlled atmosphere.

Controlled atmosphere consists of alteration of the composition of the gases in the natural air within the trailer or car to reduce the amount of oxygen content and replace it with either greater amounts of nitrogen or combinations of nitrogen and carbon dioxide and other gases. After perishables have been harvested, the respiration process continues during which the fresh fruits or vegetables utilize oxygen from the air in their ripening process and cast off carbon dioxide. It was reasoned by the scientists that if the amount of oxygen available to the produce were reduced, the respiration process would be stopped, or at least substantially slowed, and in so doing the ripening process would be delayed. The Whirlpool Corporation has developed and perfected a system, called the Tectrol process, of furnishing such controlled atmosphere. A large number of PFE trailers have been equipped for Tectrol service and are available to the shipping public for their use. The Tectrol controlled atmosphere service itself is secured by the shipper direct from TransFRESH Corporation, a licensee of Whirlpool. Tectrol service is also available from TransFRESH in new PFE cars insulated with foamed-in-place polyurethane.

Another concern providing controlled atmosphere is Oxytrol Division of Occidental Petroleum Corporation. Oxytrol has also equipped a number of PFE trailers for this service. The trailers are furnished by PFE but the Oxytrol service is purchased by the shipper direct from Oxytrol.

PFE is constantly experimenting and researching new modern car and trailer designs, methods of refrigeration, atmosphere control, and other factors that can or could be of benefit in furthering the science of perishable transportation.

Among other things, PFE is now involved in an extensive experiment testing liquid nitrogen refrigeration. It has a number of cars equipped with this new type of refrigeration system. With a liquid nitrogen refrigeration system, the car is equipped with a large, heavily insulated tank which, prior to loading, is filled with liquid nitrogen. After the car is loaded with precooled lading, the thermostat is set and the system is turned on. When the interior car temperature rises above the thermostat setting, limited amounts of liquid nitrogen are metered and released through a perforated pipe throughout the interior lading compartment. As the liquid nitrogen is released into the atmosphere, it expands to a gaseous state at a temperature of 320° below zero, absorbing available heat in the process. It has not yet been definitely determined whether this new refrigeration system is entirely economical and practical for long haul railroad refrigeration with all types of commodities.



MUCH CARE OF AN ORCHARD IS REQUIRED TO PRODUCE THE QUALITY OF PEARS BEING PICKED HERE



OUTSTANDING PRODUCTION OF HIGH QUALITY ORANGES IS THE RESULT OF PAINSTAKING EFFORT AND IDEAL CLIMATIC CONDITIONS

PFE is also in constant communication with other concerns that are producing or may produce innovations that might have a place in the in-transit protection or carriage of perishables. We are watching the development of such things as the hydro-cooling process, freeze-drying, irradiation, and various other recent ideas not yet developed to the point of determining whether they are practical for commercial application.

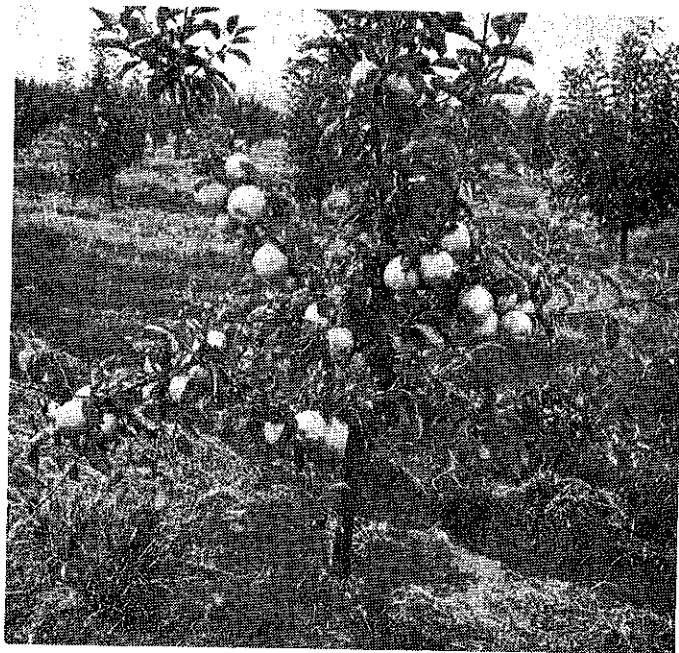
Long-range possibilities are being investigated of various recent developments in transportation of perishables, such as combinations of ship-rail or air transport using containers; exporting and importing perishables from and to North America; accelerating expansion of growing perishables in Mexico and movement to the U.S.; reduction in empty movements of cars and trailers to loading points to get greater use efficiency out of equipment; standardization of equipment for greater interchangeability; faster movement of perishables; and better ways of packaging, loading, and bracing in cars and trailers to reduce damage. Greater emphasis is also being placed upon the employing and training of personnel and the more efficient use of highly trained manpower.

To keep PFE's refrigerator car and piggyback trailer equipment in good repair and condition, PFE operates 5 car repair shops located at Roseville and City of Industry, California; Tucson, Arizona; Nampa and Pocatello, Idaho. These shops are strategically located to service and repair this equipment adjacent to loading territories. Illustrated is an aerial view of the Tucson car shop. This shop is over 7,600 ft. long and over 800 ft. wide. Its tracks can accommodate over 1,000 cars and it has a normal working capacity of over 700 cars. The shop also includes in addition to the trackage, various repair and maintenance buildings, machine shops, foundry, automated paint line, storerooms for materials, etc., all of which are necessary for the maintenance of this large fleet of cars.

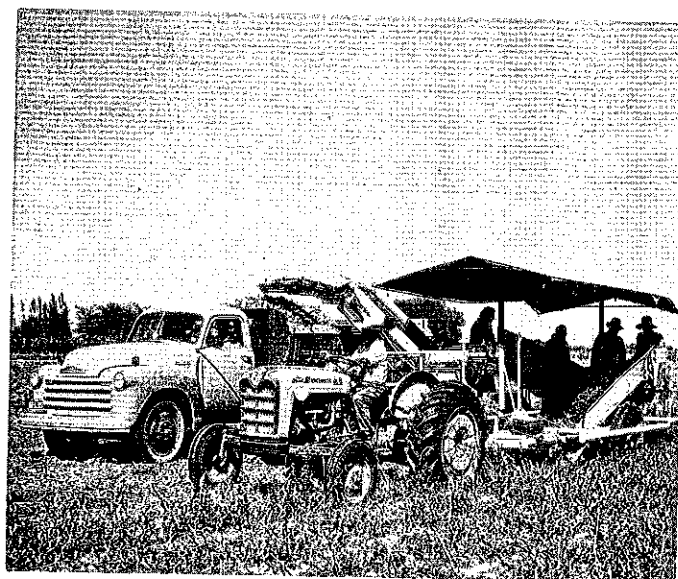
PFE's largest shop is at Roseville, California, with a total track capacity of over 1,300 cars. As many as 56,000 cars and trailers are cleaned, repaired and serviced at this facility during the peak, six-month, shipping season.

In addition to these heavy and light repair shops, PFE maintains a number of light repair stations where its equipment can be serviced and given minor repairs. These light repair stations are located at strategic points throughout the SP and UP lines.

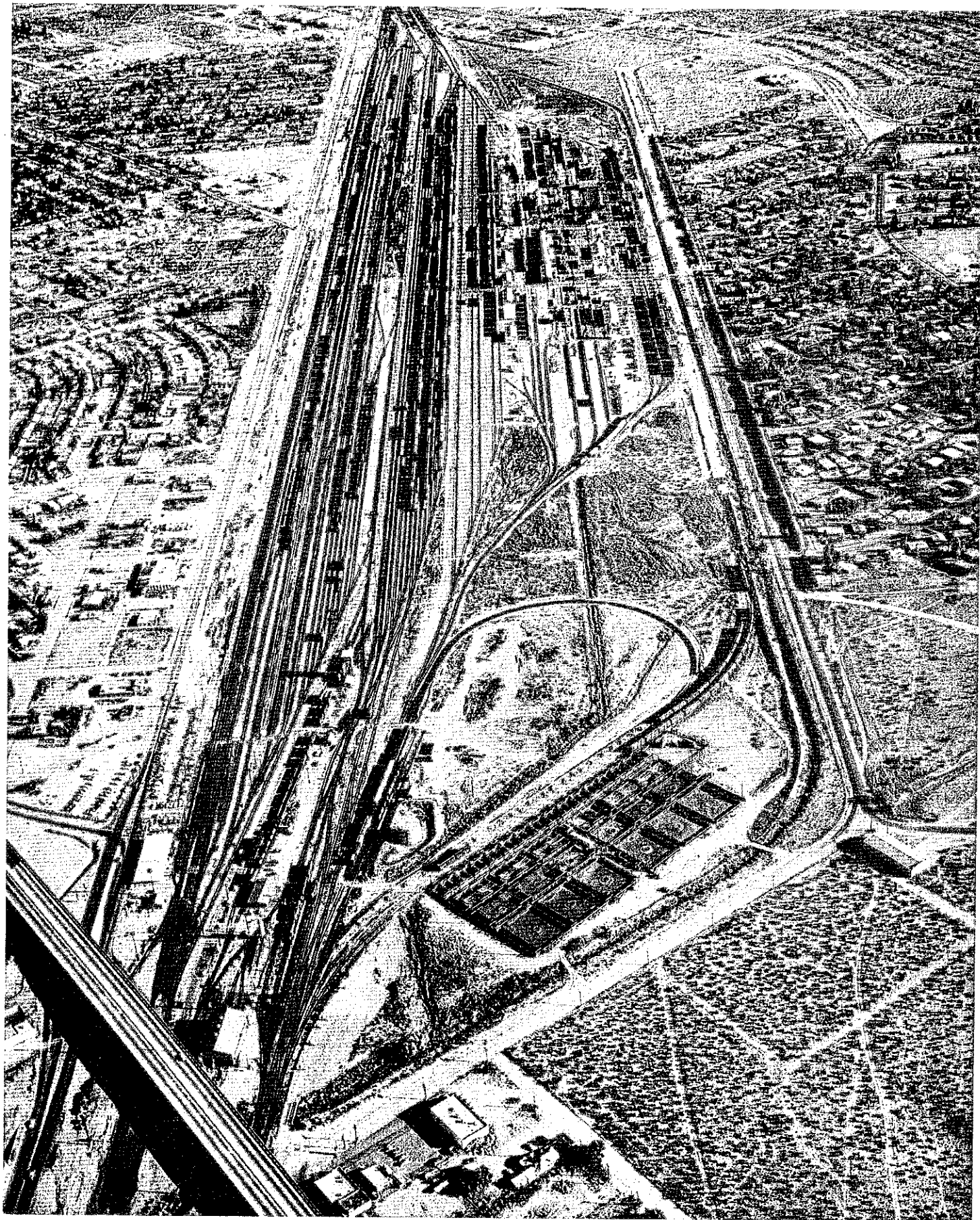
PFE also maintains trailer repair lots at San Francisco and Oakland, and one each on the SP and UP at Los Angeles, California, and various other locations, where trailers, after being unloaded from westbound trips, are taken for servicing and repairing if necessary before being sent to growing areas for eastbound perishable shipments.



STATES SERVED BY PFE ARE NOTED FOR
LARGE CROPS OF QUALITY APPLES



MECHANICAL POTATO HARVESTER



TUCSON CAR SHOP

In its peak year, 1946, PFE loaded almost a half million refrigerated carloads of perishable commodities. In recent years there has been a substantial drop in the number of carloadings, although total tonnage carried has not dropped anywhere near the same proportion. Several reasons account for this drop in loadings, among which are the larger capacity equipment now being used carrying heavier loads and more tonnage, the trend toward pre-shipment preparation of the produce to eliminate unnecessary bulk, better means of protecting the cargo so that there is less waste and, mainly increased competition from unregulated highway carriers, also some competition from air transport for highly rated and highly perishable commodities such as strawberries. However, since 1960, PFE and its Parent Lines have spent over a Quarter-Billion Dollars on new equipment with the objective of holding their own and successfully competing with unregulated highway carriers and other competition.

PFE handles approximately 23% to 25% of the Nation's total railroad perishable carloadings, the vast majority of which are grown, harvested and shipped from States and areas served by Southern Pacific and Union Pacific railroads.

PFE has exclusive contracts with Southern Pacific and Union Pacific railroads and with several Mexican railroads for supplying reefer equipment. It rents its cars to railroads throughout the United States, Canada and Mexico. It also contracts with railroads in the United States and in Mexico to lease its trailers for railroad piggyback operations. It has contracts with Southern Pacific and Union Pacific for the furnishing of protective services, that is, the previously described furnishing of mechanical refrigeration, water ice and salt refrigeration, heat, inspections and all other things necessary for the safe transportation of perishable commodities while on the lines of these railroads.



A WELL-TENDED VINEYARD IN
CALIFORNIA'S NORTH COASTAL REGION

To furnish the proper numbers and types of equipment at the proper locations when needed for loading, and to service and repair these cars and provide the necessary types of protective service, requires considerable advance planning. Many months in advance of planting of crops, estimates of loadings are obtained from all areas in which PFE operates, not only indicating the anticipated number of carloads but broken down by the various commodities and the estimated shipping dates of each commodity and volume thereof. This information is used to judge future equipment and protective service requirements. The original estimates are periodically updated to and including current loading seasons for each territory and commodity in order to have best information available at all times for judging car or trailer supply required and to determine revenue income and operating expenses.

So the equipment returning westbound from eastern destinations, both loaded and empty, may be available in the proper loading territory, arrangements are made to direct the empty equipment through various Midwestern gateways to enable proper distribution of equipment to the points where it will be needed. Within such territories, equipment is distributed to the individual shippers' loading facilities in a manner that will assure each shipper the equipment he needs and that all shippers will share equitably in the equipment available in event of tight supply or shortages during peak loading seasons. This is a difficult problem in logistics and requires constant and continuous attention.

Another service performed by PFE for its Parent Companies is the handling of diversions on perishable shipments. When a shipper loads a car or trailer, he 'waybills' this equipment to move to a certain consignee at a certain destination via a certain routing. After the shipment leaves the origin point he may, subject to rules of various tariffs governing, 'divert' this shipment, i.e., change the consignee, the destination, the routing and the type of protective service he wishes, or all of them. He does this by means of filing an order with the nearest railroad or PFE office. Generally, to accomplish a diversion or change, the shipper calls PFE by telephone and the order is handled as necessary with the various railroads to see that his orders are carried out. About half of the total shipments are diverted in one manner or another and this requires an extensive network of communication lines among the various PFE offices and between them and the various railroad offices handling the shipments in transit.

In addition to this diversion service, PFE also maintains and provides the shippers and receivers with a 'passing' service. This service comprehends that as the cars pass given points in the journey to destination, PFE advises the receivers and shippers, when desired, of said passings, and the anticipated arrival times of the shipments. This is an important segment of PFE operations because, with perishables, the receiver must be ready to handle the car or trailer to meet market demands and to avoid any decline of marketability and sale price of the foodstuffs.

In the operation of piggyback service, certain restrictions and limitations are necessary by the railroads for efficient volume handling. In a few instances, regular piggyback shipments do not provide the flexibility needed by some shippers and which are provided by highway truck service. To provide this greater flexibility with piggyback service for shippers, PFE started a new division early in 1964 called Pacific Forwarding Express, or PACFORD as it is more familiarly known to its customers. PACFORD supplements regular piggyback operations by providing multiple pickups at origin and multiple deliveries at destination, and single trailer service by 'marrying' a trailer from one shipper to another trailer from a different shipper on one flatcar, or two trailers from one shipper to two different receivers, instead of the regular requirement of two trailers from one shipper to one receiver. A modest additional charge above regular railroad tariff charge is made for this service.

Since its beginning, PACFORD has expanded its service to many destination areas including Chicago, Illinois; Minneapolis, Minnesota; Omaha, Nebraska; Kansas City, Kansas; St. Louis, Missouri; Memphis, Tennessee; New Orleans, Louisiana; Denver, Colorado; Dallas, Houston and San Antonio, Texas; Pittsburgh, Pennsylvania; and Toronto, Montreal, Sherbrooke and Quebec, Canada. In these cases, over-the-road service is provided from the railroad ramp located at one of the cities named above to a prescribed point within a radius of miles, varying with each destination from 60 to 310 miles. Single trailer service is also provided to all other Eastern cities by the 'marriage' means where regular railroad service provides piggyback service for two trailers.

In order to provide all of the services described herein, PFE has offices and representatives in major cities throughout the United States and in Canada and Mexico. Its headquarters are in San Francisco, California.

PFE employees are represented by various labor organizations, namely, the Brotherhood of Railway Clerks, the Brotherhood of Railway Carmen of America, The American Railway Supervisors Association, and the Switchmen's Union of North America.

PFE's departments and title of department head, offices, shops and stores, and other major facilities are shown on attached sheet marked 'A.' Locations of PFE establishments are shown graphically on sheet marked 'B.' PFE's refrigerator cars, by sizes and types, and its refrigerated piggyback trailers, are shown on attached sheet marked 'C.'

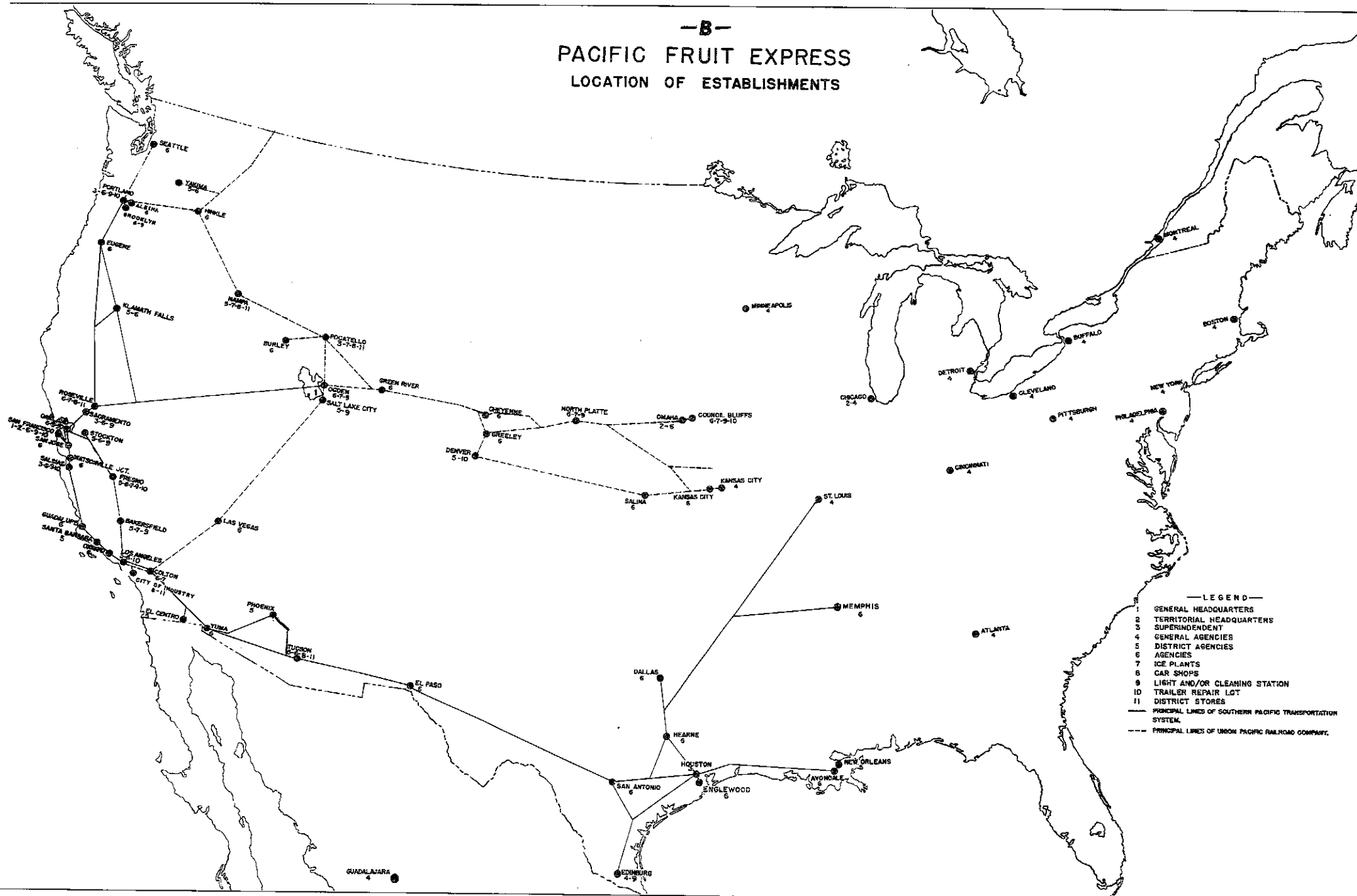
JULY 1, 1967

oAo
PACIFIC FRUIT EXPRESS COMPANY
MAJOR OFFICES AND FACILITIES

EXECUTIVE
San Francisco
Vice President
&
General Manager

TRAFFIC CHICAGO General Traffic Manager	CAR SERVICE SOUTHERN PACIFIC SAN FRANCISCO Assistant General Manager	CAR SERVICE UNION PACIFIC OMAHA Assistant General Manager	CAR SERVICE EASTERN CHICAGO Assistant General Manager	MECHANICAL AND ENGINEERING SAN FRANCISCO General M&E Officer	PURCHASES AND STORES SAN FRANCISCO Purchasing Agent	ACCOUNTING SAN FRANCISCO Auditor
ASSISTANT TRAFFIC MANAGER San Francisco	SUPERINTENDENT Los Angeles, Calif.	SUPERINTENDENT Pocatello, Idaho	GENERAL AGENCIES Atlanta, Ga. Boston, Mass. Buffalo, N.Y. Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Detroit, Mich. Minneapolis, Minn. Monterey, Cal. New York, N.Y. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo.	CAR REPAIR SHOP Roseville, Calif.	DISTRICT STORES Roseville, Calif.	
	SUPERINTENDENT Sacramento, Calif.	SUPERINTENDENT Portland, Ore.		CAR REPAIR SHOP Tucson, Ariz.	DISTRICT STORES Tucson, Ariz.	
	SUPERINTENDENT Houston, Texas	GENERAL AGENCY Kansas City, Mo.		CAR REPAIR SHOP Nampa, Idaho	DISTRICT STORES Nampa, Idaho	
	SUPERINTENDENT Salinas, Calif.	DISTRICT AGENCIES Denver, Colo. Nampa, Idaho Salt Lake City, Utah Yakima, Wash.		CAR REPAIR SHOP Pocatello, Idaho	DISTRICT STORES Pocatello, Idaho	
	SUPERINTENDENT Portland, Ore.	AGENCIES Albino, Ore. Burley, Idaho Cheyenne, Wyo. Council Bluffs, Iowa Greensboro, Colo. Greene River, Wyo. Hinkle, Ore. Kansas City, Mo. Las Vegas, Nev. North Platte, Nebr. Ogden, Utah Omaha, Neb. Portland, Ore. Salina, Kans. Seattle, Wash. Yakima, Wash.	AGENCY Memphis, Tenn.	CAR REPAIR SHOP City of Industry Calif.	DISTRICT STORES City of Industry Calif.	
	ASSISTANT SUPERINTENDENT Fresno, Calif.			LIGHT REPAIR STATIONS Bakersfield, Calif. Brooklyn, Ore. Council Bluffs, Iowa Edinburg, Texas Fresno, Calif. North Platte, Nebr. Oakland, Calif. Ogden, Utah Portland, Ore. Sacramento, Calif. Salinas, Calif. Salt Lake City, Utah San Francisco, Calif. Stockton, Calif.		
	GENERAL REPRESENTATIVE Guadalupe, Mexico					
	GENERAL AGENCY Edinburg, Texas	ICE PLANTS Council Bluffs, Iowa Nampa, Idaho North Platte, Nebr. Ogden, Utah Pocatello, Idaho		TRAILER REPAIR LOTS Council Bluffs, Iowa Denver, Colo. Fresno, Calif. Los Angeles, Cal. (SP) Los Angeles, Cal. (UP) Oakland, Calif. Portland, Ore. Salinas, Calif. San Francisco, Calif.		
	DISTRICT AGENCIES Bakersfield, Calif. El Centro, Calif. Klamath Falls, Ore. New Orleans, La. Phoenix, Ariz. Santa Barbara, Calif. Stockton, Calif. Tucson, Ariz.					
	AGENCIES Avondale, La. Brooklyn, Ore. Colton, Calif. Dallas, Texas El Paso, Texas Englewood, Texas Eugene, Ore. Fresno, Calif. Guadalupe, Calif. Hearne, Texas Klamath Falls, Ore. Los Angeles, Calif. Oakland, Calif. Oxnard, Calif. Roseville, Calif. Sacramento, Calif. Salinas, Calif. San Antonio, Tex. San Francisco, Calif. San Jose, Calif. Stockton, Calif. Tucson, Ariz. Watsonville Jct., Cal. Yuma, Ariz.					
	ICE PLANTS Bakersfield, Calif. Colton, Calif. Fresno, Calif. Roseville, Calif.					

-B-
PACIFIC FRUIT EXPRESS
LOCATION OF ESTABLISHMENTS



CONDENSED STATISTICAL SUMMARY - PFE CARS AND TRAILERS

Number of Cars	Capacity (1)		Inside Dimensions (1)			Outside Length	Door Width	Load Pro- tection Devices	Cushioned Under- frame	Meat Rails(2)	Controlled Atmosphere(4)
	Cubic Feet	Weight (Pounds)	Length	Width	Height						
MECHANICAL											
491	2380	80000	35'4"	8'3"	8'2"	40'0"	6'0"	-	-	-	-
190	2913	130000	44'7"	8'6"	7'8"	50'0"	6'0"	-	-	-	-
314	2526	80000	44'7"	8'6"	6'8"	50'0"	6'0"	-	-	Yes	-
194	3085	130000	44'7"	8'6"	8'1"	50'0"	6'0"	-	-	-	-
485	3026	89000	44'6"	8'6"	8'0"	50'0"	6'0"	-	-	-	-
5	2982	84000	43'9"	8'6"	8'0"	50'0"	6'0"	Yes	-	-	-
977	3174	120000	44'10"	8'8"	8'2"	50'0"	8'0"	Yes	-	-	-
25	3472	120000	45'2"	9'0"	8'6"	50'0"	8'0"	Yes	Yes	-	-
984	3989	130000	50'0"	9'0"	8'10"	57'0"	8'0"	Yes	Yes	-	Tectrol
5472 (3)	4022	130000	50'0"	9'0"	8'11"	57'0"	9'0"	Yes	Yes	-	Tectrol
15 (5)	2337	80000	34'0"	8'8"	8'0"	40'0"	6'0"	-	-	-	-
9152											

ICE CARS

7456	1988	80000	33'2"	8'3"	7'3"	40'0"	4'0"	-	-	-	-
3290	2022	80000	33'2"	8'3"	7'3"	40'0"	6'0"	-	-	-	-
567	2153	86000	33'2"	8'3"	7'10"	40'0"	4'0"	-	-	-	-
285	2153	86000	33'2"	8'3"	7'10"	40'0"	6'0"	-	-	-	-
457 (6)	2248	80000	36'6"	8'3"	7'5"	40'0"	4'0"	-	-	-	-
216 (7)	2342	86000	39'2"	8'3"	7'3"	40'0"	4'0"	-	-	-	-
85	1836	60000	33'2"	8'3"	6'8"	40'0"	4'0"	-	-	Yes	-

12356

TRAILERS	Capacity (1) (8)		Inside Dimensions (1)			Outside Height	Weight Empty	Load Pro- tection Devices	Side Doors	Meat Rails(2)	Controlled Atmosphere(4)	Container Type(9)
	Cubic Feet		Length	Width	Height							
174	2249		37'9"	7'4"	8'1"	13'6"	16700	-	-	-	-	-
218	2176		38'1"	7'4"	7'9"	13'6"	17700	-	-	Yes	-	-
97 (10)	2299		38'9"	7'5"	8'0"	13'0"	15500	-	-	-	Oxytrol	-
19	2270		38'0"	7'4"	8'2"	13'6"	17400	-	-	-	-	Yes
313	2347		37'8"	7'4"	8'6"	13'6"	15600	Yes	-	-	-	Yes
190	2076		38'2"	7'4"	7'5"	12'6"	16300	-	-	-	-	Yes
203	2224		37'8"	7'4"	8'0"	13'6"	16600	Yes	-	-	-	Yes
204	1868		37'7"	7'4"	6'9"	12'6"	16500	Yes	-	Yes	-	Yes
6	2076		38'2"	7'4"	7'5"	12'6"	16300	-	-	-	Tectrol	Yes
325	2347		37'8"	7'4"	8'6"	13'6"	15500	Yes	-	-	Tectrol	Yes
683	2358		37'10"	7'4"	8'6"	13'6"	15500	Yes	-	-	-	Yes
195	2071		37'8"	7'4"	7'6"	12'6"	16000	Yes	Yes	-	-	Yes
500 (10)	2368		38'0"	7'4"	8'6"	13'6"	16000	Yes	-	-	-	-
3127												

NOTE 1: Dimensions vary somewhat within each group - average is shown.

NOTE 2: Overhead rails provided for transporting hanging meat.

NOTE 3: Includes 1000 cars on order.

NOTE 4: Processes by which commodity ripening is retarded through introduction of nitrogen and/or other gasses into closed trailer.

NOTE 5: Uses liquid nitrogen as refrigerant instead of conventional diesel powered units.

NOTE 6: Cars have ice bunkers at only one end. A small undermount diesel engine provides continuous air circulation.

NOTE 7: Bunkers removed or permanently collapsed. Ice is crushed and blown directly on top of commodity.

NOTE 8: Loading capacity for all trailers - 42,000 pounds.

NOTE 9: Trailers with removable wheel assemblies. Mechanical unit and engine mounted on nose of trailer.

NOTE 10: On order.

